```python
import torch
import numpy as np
from torch.autograd import Variable
import time


#Call model of layers and its forward step
from Forward_with_Layer_Setting import Net

device = torch.device("cuda:0" if torch.cuda.is_available() else "cpu")

#Call training functions of Loss functions
from NSpde_loss import lossNSpde
from MvBdry_Coefficient_and_Loss import lossMvBdry
from BoundaryLoss import lossBdry
from InitialConditionLoss import lossIC, lossIC_with



def create_network(IC_Only_Train):

    net = Net()
    net = net.to(device)

    #Set final times for running training
    time_slices = np.array([.1,.2,.4]) #,.4,.6,.8,1

    #Load Training Points
    x_domain, y_domain, t_zero, x_Bdry, y_Bdry, x_l_Bdry, x_u_Bdry, y_l_Bdry, y_u_Bdry = twoDimTrainPts(ne

    start = time.time()

    #Start Training only on IC
    if IC_Only_Train == True:
        print('Training Only on the Initial Condition')
        Create_IC_Parameters(x_domain, y_domain, t_zero, 20000, 10**-3, 'IC_Only.pt', record_loss = 100, p
        IC_Done = time.time()
        print('IC Time:\t', IC_Done-start)

        return 0
```

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time_vec = [0, 0, 0, 0]


#attempt to load IC if it exists
try:
    net.load_state_dict(torch.load("IC_Only.pt"))
except:
    pass

global epsilon #used to track loss
epsilon = []

print('Training PDE')

for i in range(4): #4
    #Set loop to optimize in progressively smaller learning rates
    if i == 0:
        #First loop uses progressively increasing time intervals
        print('Executing Pass 1')
        iterations = 50000
        learning_rate = 5*10**-3
    elif i == 1:
        print('Executing Pass 2')
        #time_slices = time_slices[-1]
        iterations = 20000
        learning_rate = 5*10**-4
    elif i == 2:
        print('Executing Pass 3')
        iterations = 20000
        learning_rate = 5*10**-5
    elif i ==3:
        print('Executing Pass 4')
        iterations = 2 #0000
        learning_rate = 10**-5

    training_loop(net, x_domain, y_domain, t_zero, x_Bdry, y_Bdry, x_l_Bdry, x_u_Bdry,
                  y_l_Bdry, y_u_Bdry, time_slices, iterations, learning_rate, IC_coefficient = 1, reco
    torch.save(net.state_dict(), f"NNlayers_Bubble_{i}.pt")
    np.savetxt('epsilon.txt', epsilon)
    time_vec[i] = time.time()
```

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        np.savetxt('epsilon.txt', epsilon)

        end = time.time()

        print("Total Time:\t", end-start, '\nPass 1 Time:\t', time_vec[0]-start, '\nPass 2 Time:\t', time_vec[

def twoDimTrainPts(net, Domain_collocation, Bdry_collocation):
    #Set of all the recorded xy variables as base data for chasing during training

    # Domain boundary in the range [0, 1]x[0, 2] and time in [0, 1].
    x_l = net.x1_l
    x_u = net.x1_u
    y_l = net.x2_l
    y_u = net.x2_u

    #time starts at lower bound 0, ends at upper bouund updated in slices
    t_l = 0

    #Pick IC/Mv Bdry/NSpde Condition Training Random Points in Numpy
    x_domain = np.random.uniform(low= x_l, high=x_u, size=(Domain_collocation, 1))
    y_domain = np.random.uniform(low= y_l, high=y_u, size=(Domain_collocation, 1))

    #Move to pytorch tensors
    x_domain = Variable(torch.from_numpy(x_domain).float(), requires_grad=True).to(device)
    y_domain = Variable(torch.from_numpy(y_domain).float(), requires_grad=True).to(device)

    #Pick IC Training t starting points to make tensor
    t_zero = Variable(torch.zeros_like(x_domain), requires_grad=True).to(device)

    #Pick BC Training Random Points in Numpy
    x_Bdry = np.random.uniform(low=x_l, high=x_u, size=(Bdry_collocation,1))
    y_Bdry = np.random.uniform(low=y_l, high=y_u, size=(Bdry_collocation,1))

    #Move to pytorch tensors
    x_Bdry= Variable(torch.from_numpy(x_Bdry).float(), requires_grad=True).to(device)
    y_Bdry = Variable(torch.from_numpy(y_Bdry).float(), requires_grad=True).to(device)

    ##Pick pts to make tensor for No-Slip Boundary Condition
    x_l_Bdry = Variable(x_l * torch.ones_like(x_Bdry), requires_grad=True).to(device)
    x_u_Bdry = Variable(x_u * torch.ones_like(x_Bdry), requires_grad=True).to(device)
    y_l_Bdry = Variable(y_l * torch.ones_like(x_Bdry), requires_grad=True).to(device)
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        y_u_Bdry = Variable(y_u * torch.ones_like(x_Bdry), requires_grad=True).to(device)


        return x_domain, y_domain, t_zero, x_Bdry, y_Bdry, x_l_Bdry, x_u_Bdry, y_l_Bdry, y_u_Bdry

def tsliceTrainPts(net, Domain_collocation, Bdry_collocation, final_time):
    #Set of all the recorded t variable as base data for chasing during training

    #time starts at lower bound 0, ends at upper bouund updated in slices
    t_l = net.t_l

    #Pick IC/Mv Bdry/NSpde Condition Training Random Points in Numpy
    t_domain = np.random.uniform(low=t_l, high=final_time, size=(Domain_collocation, 1))

    #Move to pytorch tensors
    t_domain = Variable(torch.from_numpy(t_domain).float(), requires_grad=True).to(device)

    #Pick IC Training t starting points to make tensor
    t_zero = Variable(torch.zeros_like(t_domain), requires_grad=True).to(device)

    #Pick BC Training Random Points in Numpy
    t_Bdry = np.random.uniform(low=t_l, high=final_time, size=(Bdry_collocation,1))

    #Move to pytorch tensors
    t_Bdry = Variable(torch.from_numpy(t_Bdry).float(), requires_grad=True).to(device)

    return t_domain, t_Bdry

def get_lr(optimizer):
    for param_group in optimizer.param_groups:
        return param_group['lr']

def Create_IC_Parameters(x_domain, y_domain, t_zero, iterations, learning_rate, filename, record_loss, pri
    ICnet = Net().to(device)

    IC_Only_training(ICnet, x_domain, y_domain, t_zero, iterations, learning_rate, record_loss, print_loss

    torch.save(ICnet.state_dict(), filename)


def IC_Only_training(net, x_domain, y_domain, t_zero, iterations, learning_rate, record_loss, print_loss):
    device = torch.device("cuda:0" if torch.cuda.is_available() else "cpu")
```

```python
    # Domain boundary in the range [0, 1]x[0, 2] and time in [0, 1].
    #x_l = net.x1_l
    #x_u = net.x1_u
    #y_l = net.x2_l
    #y_u = net.x2_u

    ##Define Colloacation Points with Initial Condition
    #IC_collocation = collocation

    #define in numpy
    #x_IC = np.random.uniform(low=x_l, high=x_u, size=(IC_collocation,1))
    #y_IC = np.random.uniform(low=y_l, high=y_u, size=(IC_collocation,1))

    #move to pytorch tensors
    #input_x_IC = Variable(torch.from_numpy(x_IC).float(), requires_grad=True).to(device)
    #input_y_IC = Variable(torch.from_numpy(y_IC).float(), requires_grad=True).to(device)


    #learning rate update
    for g in net.optimizer.param_groups:
        g['lr'] = learning_rate

    #training loop
    epsilon_IC = [] #placeholder to track decreasing loss
    for epoch in range(1, iterations+1):


        # Resetting gradients to zero
        net.optimizer.zero_grad()

        #Loss based on Initial Condition
        loss = lossIC(net, x_domain, y_domain, t_zero)

        loss.backward()

        # Gradient Norm Clipping
        torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=2, error_if_nonfinit

        #Gradient Value Clipping
        #nn.utils.clip_grad_value_(net.parameters(), clip_value=1.0)
```

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        net.optimizer.step()

        #Print Loss every 1000 Epochs
        with torch.autograd.no_grad():

            if epoch%record_loss == 0:
                epsilon_IC = np.append(epsilon_IC, loss.cpu().detach().numpy())
            if epoch%print_loss == 0:
                print("Iteration:", epoch, "Initial Condition Loss:", loss.data)

    np.savetxt('epsilon_IC.txt', epsilon_IC)



def training_loop(net, x_domain, y_domain, t_zero, x_Bdry, y_Bdry, x_l_Bdry, x_u_Bdry, y_l_Bdry, y_u_Bdry,
    global epsilon
    device = torch.device("cuda:0" if torch.cuda.is_available() else "cpu")

    #learning rate update
    for g in net.optimizer.param_groups:
        g['lr'] = learning_rate

    for final_time in time_slices:

        with torch.autograd.no_grad():
            print("Current Final Time:", final_time, "Current Learning Rate: ", get_lr(net.optimizer))

        indicator = False
        reset_regularization = 1000

        #Iterate over these points

        t_domain, t_Bdry = tsliceTrainPts(net, Domain_collocation = int(1000), Bdry_collocation = int(100)
        for epoch in range(1, iterations+1):
            # Loss calculation based on partial differential equation (PDE)

            if epoch%reset_regularization == 0:
                indicator = False

            if epoch%reset_regularization != 0: #To detect error on forward/Backward, add hashtag on this
                #with torch.autograd.detect_anomaly(): #use this line alternatively by deleting hashtag.
```

```python
###Training steps
# Resetting gradients to zero
net.optimizer.zero_grad()

#Loss based on Initial Condition
mse_IC = lossIC(net, x_domain, y_domain, t_zero)
# Gradient Norm Clipping
torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_

#Loss based on Boundary Condition (Containing No-Slip and Free-slip)
mse_BC = lossBdry(net, x_Bdry, y_Bdry, t_Bdry, x_l_Bdry, x_u_Bdry, y_l_Bdry, y_u_Bdry)
# Gradient Norm Clipping
torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_

#Loss based on PDE
mse_NS, mse_NSdiv = lossNSpde(net, x_domain, y_domain, t_domain)
# Gradient Norm Clipping
torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_

#Loss based on Moving Boundary
Jump_loss, SurfaceTension_loss = lossMvBdry(net, x_domain, y_domain, t_domain)
mse_MvBdry = Jump_loss + SurfaceTension_loss
# Gradient Norm Clipping
torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_


if indicator == False:
    indicator = True
    IC_regular = mse_IC.detach()
    BC_regular = mse_BC.detach()
    pde_regular = mse_NS.detach()
    pdediv_regular = mse_NSdiv.detach()
    MvBdry_regular = mse_MvBdry.detach()

raw_loss = IC_coefficient * mse_IC + mse_BC + mse_NS + mse_MvBdry

mse_IC = mse_IC #/IC_regular
mse_BC = mse_BC #/BC_regular
mse_NS = mse_NS #/pde_regular
mse_NSdiv = mse_NSdiv #/pde_regular
mse_MvBdry = mse_MvBdry #/MvBdry_regular
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            #Combine all Loss functions
            loss = mse_BC + 50 * mse_MvBdry + (10)**(8) *mse_IC+ mse_NS + mse_NSdiv #IC_coefficient *
            # Gradient Norm Clipping
            torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_

            loss.backward()
            # Gradient Norm Clipping
            torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_

        #Gradient Value Clipping
        #nn.utils.clip_grad_value_(net.parameters(), clip_value=1.0)
        net.optimizer.step()
        # Gradient Norm Clipping
        torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_nonf

        #Print Loss every 1000 Epochs
        with torch.autograd.no_grad():
            if epoch%record_loss == 0:
                epsilon = np.append(epsilon, raw_loss.cpu().detach().numpy())
            if epoch%print_loss == 0:
                print("Iteration:", epoch, "\tTotal Loss:", loss.data)
                print("IC Loss: ", mse_IC.data, "\tBC Loss: ", mse_BC.data, "\tNS PDE Loss: ", mse_NS.


create_network(True)
create_network(False)
```

```
Training Only on the Initial Condition
Iteration: 1000 Initial Condition Loss: tensor(0.0702)
Iteration: 2000 Initial Condition Loss: tensor(0.0222)
Iteration: 3000 Initial Condition Loss: tensor(0.0081)
Iteration: 4000 Initial Condition Loss: tensor(0.0039)
Iteration: 5000 Initial Condition Loss: tensor(0.0020)
Iteration: 6000 Initial Condition Loss: tensor(0.0010)
Iteration: 7000 Initial Condition Loss: tensor(0.0005)
Iteration: 8000 Initial Condition Loss: tensor(0.0003)
Iteration: 9000 Initial Condition Loss: tensor(0.0002)
Iteration: 10000 Initial Condition Loss: tensor(0.0001)
Iteration: 11000 Initial Condition Loss: tensor(8.4491e-05)
Iteration: 12000 Initial Condition Loss: tensor(5.0671e-05)
Iteration: 13000 Initial Condition Loss: tensor(2.9168e-05)
Iteration: 14000 Initial Condition Loss: tensor(1.6614e-05)
Iteration: 15000 Initial Condition Loss: tensor(9.4455e-06)
Iteration: 16000 Initial Condition Loss: tensor(5.2562e-06)
Iteration: 17000 Initial Condition Loss: tensor(4.1356e-06)
Iteration: 18000 Initial Condition Loss: tensor(1.7165e-06)
Iteration: 19000 Initial Condition Loss: tensor(1.5437e-06)
Iteration: 20000 Initial Condition Loss: tensor(2.3408e-06)
IC Time:        117.29201102256775
Training PDE
Executing Pass 1
Current Final Time: 0.1 Current Learning Rate:  0.005
Iteration: 200  Total Loss: tensor(60594456.)
IC Loss:  tensor(0.3120)       BC Loss:  tensor(0.6808)       NS PDE Loss:  tensor(92.8572)   NS Div Free
Loss:  tensor(5.7504e-17)      Mv Bdry Jump_loss:  tensor(0.0002)     SurfaceTension_loss:  tensor(58789
9.3750)
Iteration: 400  Total Loss: tensor(1.5434e+09)
IC Loss:  tensor(14.4539)      BC Loss:  tensor(1.5565)       NS PDE Loss:  tensor(90.2855)   NS Div Free
Loss:  tensor(2.8705e-16)      Mv Bdry Jump_loss:  tensor(0.0055)     SurfaceTension_loss:  tensor(195929
2.2500)
Iteration: 600  Total Loss: tensor(3.9119e+09)
IC Loss:  tensor(38.1286)      BC Loss:  tensor(1.4662)       NS PDE Loss:  tensor(93.8201)   NS Div Free
Loss:  tensor(6.8710e-17)      Mv Bdry Jump_loss:  tensor(0.0002)     SurfaceTension_loss:  tensor(198089
2.7500)
Iteration: 800  Total Loss: tensor(1.2916e+12)
IC Loss:  tensor(9.5523)       BC Loss:  tensor(0.9525)       NS PDE Loss:  tensor(92.8804)   NS Div Free
Loss:  tensor(2.0880e-17)      Mv Bdry Jump_loss:  tensor(0.0012)     SurfaceTension_loss:  tensor(2.5812
e+10)
Iteration: 1000        Total Loss: tensor(4.8366e+08)
```

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IC Loss:  tensor(4.8046)         BC Loss:  tensor(0.2572)        NS PDE Loss:  tensor(95.4765)   NS Div Free
Loss:  tensor(6.1487e-19)      Mv Bdry Jump_loss:  tensor(0.0001)     SurfaceTension_loss:  tensor(63982.
3164)
Iteration: 1200       Total Loss: tensor(2.7696e+08)
IC Loss:  tensor(2.3349)         BC Loss:  tensor(0.0691)        NS PDE Loss:  tensor(86.4173)   NS Div Free
Loss:  tensor(2.2114e-17)      Mv Bdry Jump_loss:  tensor(0.0001)     SurfaceTension_loss:  tensor(86932
0.5000)
Iteration: 1400       Total Loss: tensor(95841360.)
IC Loss:  tensor(0.6998)         BC Loss:  tensor(0.0409)        NS PDE Loss:  tensor(92.4050)   NS Div Free
Loss:  tensor(1.4523e-18)      Mv Bdry Jump_loss:  tensor(0.0015)     SurfaceTension_loss:  tensor(51730
9.1875)
Iteration: 1600       Total Loss: tensor(26568434.)
IC Loss:  tensor(0.2634)         BC Loss:  tensor(0.0274)        NS PDE Loss:  tensor(93.5033)   NS Div Free
Loss:  tensor(1.6048e-18)      Mv Bdry Jump_loss:  tensor(6.6312e-05)  SurfaceTension_loss:  tensor(4640.4
844)
Iteration: 1800       Total Loss: tensor(13840545.)
IC Loss:  tensor(0.1370)         BC Loss:  tensor(0.0189)        NS PDE Loss:  tensor(91.7189)   NS Div Free
Loss:  tensor(2.6045e-18)      Mv Bdry Jump_loss:  tensor(1.1807e-05)  SurfaceTension_loss:  tensor(2719.1
831)
Iteration: 2000       Total Loss: tensor(24762118.)
IC Loss:  tensor(0.1790)         BC Loss:  tensor(0.0132)        NS PDE Loss:  tensor(94.3901)   NS Div Free
Loss:  tensor(9.9429e-21)      Mv Bdry Jump_loss:  tensor(1.3008e-06)  SurfaceTension_loss:  tensor(13717
6.3750)
Iteration: 2200       Total Loss: tensor(36223964.)
IC Loss:  tensor(0.0784)         BC Loss:  tensor(0.0145)        NS PDE Loss:  tensor(94.5109)   NS Div Free
Loss:  tensor(1.4997e-18)      Mv Bdry Jump_loss:  tensor(8.0075e-06)  SurfaceTension_loss:  tensor(56767
3.8750)
Iteration: 2400       Total Loss: tensor(4396631.)
IC Loss:  tensor(0.0402)         BC Loss:  tensor(0.0136)        NS PDE Loss:  tensor(94.0732)   NS Div Free
Loss:  tensor(3.2598e-18)      Mv Bdry Jump_loss:  tensor(1.4641e-06)  SurfaceTension_loss:  tensor(7517.4
199)
Iteration: 2600       Total Loss: tensor(12763320.)
IC Loss:  tensor(0.1245)         BC Loss:  tensor(0.0080)        NS PDE Loss:  tensor(94.4942)   NS Div Free
Loss:  tensor(1.2413e-18)      Mv Bdry Jump_loss:  tensor(1.3292e-06)  SurfaceTension_loss:  tensor(6262.9
399)
Iteration: 2800       Total Loss: tensor(16212315.)
IC Loss:  tensor(0.1590)         BC Loss:  tensor(0.0084)        NS PDE Loss:  tensor(94.0760)   NS Div Free
Loss:  tensor(2.8413e-18)      Mv Bdry Jump_loss:  tensor(4.6609e-07)  SurfaceTension_loss:  tensor(6220.2
012)
Iteration: 3000       Total Loss: tensor(3970347.7500)
IC Loss:  tensor(0.0356)         BC Loss:  tensor(0.0103)        NS PDE Loss:  tensor(94.0853)   NS Div Free
Loss:  tensor(2.2241e-18)      Mv Bdry Jump_loss:  tensor(3.1339e-06)  SurfaceTension_loss:  tensor(8128.5
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303)
Iteration: 3200        Total Loss: tensor(2371222.7500)
IC Loss:  tensor(0.0233)        BC Loss:  tensor(0.0159)        NS PDE Loss:  tensor(93.2141)   NS Div Free
Loss:  tensor(3.4572e-18)       Mv Bdry Jump_loss:  tensor(1.1094e-06)  SurfaceTension_loss:  tensor(857.21
45)
Iteration: 3400        Total Loss: tensor(49807440.)
IC Loss:  tensor(0.2807)        BC Loss:  tensor(0.0086)        NS PDE Loss:  tensor(91.7321)   NS Div Free
Loss:  tensor(7.4556e-18)       Mv Bdry Jump_loss:  tensor(7.1150e-05)  SurfaceTension_loss:  tensor(43480
5.0625)
Iteration: 3600        Total Loss: tensor(66008300.)
IC Loss:  tensor(0.6092)        BC Loss:  tensor(0.0075)        NS PDE Loss:  tensor(93.3992)   NS Div Free
Loss:  tensor(2.6654e-19)       Mv Bdry Jump_loss:  tensor(1.6081e-05)  SurfaceTension_loss:  tensor(10173
5.6875)
Iteration: 3800        Total Loss: tensor(17672818.)
IC Loss:  tensor(0.1380)        BC Loss:  tensor(0.0075)        NS PDE Loss:  tensor(94.9493)   NS Div Free
Loss:  tensor(6.3319e-20)       Mv Bdry Jump_loss:  tensor(1.1937e-05)  SurfaceTension_loss:  tensor(77368.
9453)
Iteration: 4000        Total Loss: tensor(21754876.)
IC Loss:  tensor(0.1902)        BC Loss:  tensor(0.0074)        NS PDE Loss:  tensor(94.6611)   NS Div Free
Loss:  tensor(1.4360e-18)       Mv Bdry Jump_loss:  tensor(7.4007e-06)  SurfaceTension_loss:  tensor(54608.
9453)
Iteration: 4200        Total Loss: tensor(29136660.)
IC Loss:  tensor(0.2562)        BC Loss:  tensor(0.0071)        NS PDE Loss:  tensor(91.8441)   NS Div Free
Loss:  tensor(2.9994e-18)       Mv Bdry Jump_loss:  tensor(6.8591e-06)  SurfaceTension_loss:  tensor(70399.
6484)
Iteration: 4400        Total Loss: tensor(13611124.)
IC Loss:  tensor(0.1247)        BC Loss:  tensor(0.0077)        NS PDE Loss:  tensor(94.8447)   NS Div Free
Loss:  tensor(3.6167e-19)       Mv Bdry Jump_loss:  tensor(5.8634e-06)  SurfaceTension_loss:  tensor(22783.
8828)
Iteration: 4600        Total Loss: tensor(25482426.)
IC Loss:  tensor(0.2101)        BC Loss:  tensor(0.0072)        NS PDE Loss:  tensor(94.2528)   NS Div Free
Loss:  tensor(8.2497e-20)       Mv Bdry Jump_loss:  tensor(3.9980e-06)  SurfaceTension_loss:  tensor(89367.
4844)
Iteration: 4800        Total Loss: tensor(76991512.)
IC Loss:  tensor(0.7582)        BC Loss:  tensor(0.0085)        NS PDE Loss:  tensor(93.9492)   NS Div Free
Loss:  tensor(4.9403e-19)       Mv Bdry Jump_loss:  tensor(9.6455e-06)  SurfaceTension_loss:  tensor(23507.
1152)
Iteration: 5000        Total Loss: tensor(8949171.)
IC Loss:  tensor(0.0705)        BC Loss:  tensor(0.0080)        NS PDE Loss:  tensor(94.6786)   NS Div Free
Loss:  tensor(9.0810e-19)       Mv Bdry Jump_loss:  tensor(2.6515e-05)  SurfaceTension_loss:  tensor(38002.
6250)
Iteration: 5200        Total Loss: tensor(6093546.)
```

IC Loss: tensor(0.0434)   BC Loss: tensor(0.0071)   NS PDE Loss: tensor(92.2669)   NS Div Free Loss: tensor(6.3252e-20)   Mv Bdry Jump_loss: tensor(3.3910e-06) SurfaceTension_loss: tensor(35064.6328)
Iteration: 5400   Total Loss: tensor(4.3984e+08)
IC Loss: tensor(2.3809)   BC Loss: tensor(0.0079)   NS PDE Loss: tensor(93.7894)   NS Div Free Loss: tensor(1.3218e-18)   Mv Bdry Jump_loss: tensor(3.8508e-05) SurfaceTension_loss: tensor(4034854.)
Iteration: 5600   Total Loss: tensor(8443800.)
IC Loss: tensor(0.0758)   BC Loss: tensor(0.0068)   NS PDE Loss: tensor(94.6022)   NS Div Free Loss: tensor(1.0199e-19)   Mv Bdry Jump_loss: tensor(1.5750e-06) SurfaceTension_loss: tensor(17295.2930)
Iteration: 5800   Total Loss: tensor(6796805.)
IC Loss: tensor(0.0541)   BC Loss: tensor(0.0068)   NS PDE Loss: tensor(94.3926)   NS Div Free Loss: tensor(1.4822e-20)   Mv Bdry Jump_loss: tensor(8.6902e-07) SurfaceTension_loss: tensor(27817.2109)
Iteration: 6000   Total Loss: tensor(5357004.)
IC Loss: tensor(0.0447)   BC Loss: tensor(0.0069)   NS PDE Loss: tensor(93.1531)   NS Div Free Loss: tensor(3.7028e-19)   Mv Bdry Jump_loss: tensor(1.5029e-06) SurfaceTension_loss: tensor(17660.4707)
Iteration: 6200   Total Loss: tensor(5689190.5000)
IC Loss: tensor(0.0515)   BC Loss: tensor(0.0009)   NS PDE Loss: tensor(93.8731)   NS Div Free Loss: tensor(4.5012e-20)   Mv Bdry Jump_loss: tensor(3.1879e-07) SurfaceTension_loss: tensor(10802.3691)
Iteration: 6400   Total Loss: tensor(26824456.)
IC Loss: tensor(0.2486)   BC Loss: tensor(0.0060)   NS PDE Loss: tensor(94.6730)   NS Div Free Loss: tensor(9.4221e-19)   Mv Bdry Jump_loss: tensor(8.5029e-06) SurfaceTension_loss: tensor(39328.5234)
Iteration: 6600   Total Loss: tensor(1.1598e+08)
IC Loss: tensor(1.1544)   BC Loss: tensor(0.0001)   NS PDE Loss: tensor(94.1011)   NS Div Free Loss: tensor(4.6131e-19)   Mv Bdry Jump_loss: tensor(1.3214e-08) SurfaceTension_loss: tensor(10690.8320)
Iteration: 6800   Total Loss: tensor(6822512.)
IC Loss: tensor(0.0564)   BC Loss: tensor(0.0005)   NS PDE Loss: tensor(93.2191)   NS Div Free Loss: tensor(1.8055e-18)   Mv Bdry Jump_loss: tensor(1.3136e-06) SurfaceTension_loss: tensor(23586.4297)
Iteration: 7000   Total Loss: tensor(2952085.5000)
IC Loss: tensor(0.0259)   BC Loss: tensor(0.0006)   NS PDE Loss: tensor(93.9865)   NS Div Free Loss: tensor(3.4256e-18)   Mv Bdry Jump_loss: tensor(2.3096e-07) SurfaceTension_loss: tensor(7333.1958)
Iteration: 7200   Total Loss: tensor(28960880.)
IC Loss: tensor(0.2700)   BC Loss: tensor(0.0001)   NS PDE Loss: tensor(94.5814)   NS Div Free Loss: tensor(1.7143e-19)   Mv Bdry Jump_loss: tensor(1.0022e-07) SurfaceTension_loss: tensor(39277.

5586)
Iteration: 7400   Total Loss: tensor(53983540.)
IC Loss: tensor(0.5221)   BC Loss: tensor(6.5341e-05)   NS PDE Loss: tensor(93.5452)   NS Div Free
Loss: tensor(3.8924e-19)   Mv Bdry Jump_loss: tensor(2.4901e-08) SurfaceTension_loss: tensor(35423.
6406)
Iteration: 7600   Total Loss: tensor(6167246.)
IC Loss: tensor(0.0487)   BC Loss: tensor(6.3832e-05)   NS PDE Loss: tensor(93.5849)   NS Div Free
Loss: tensor(6.3968e-19)   Mv Bdry Jump_loss: tensor(1.2254e-07) SurfaceTension_loss: tensor(25962.
0527)
Iteration: 7800   Total Loss: tensor(6889950.)
IC Loss: tensor(0.0374)   BC Loss: tensor(0.0001)   NS PDE Loss: tensor(93.6562)   NS Div Free
Loss: tensor(3.5430e-19)   Mv Bdry Jump_loss: tensor(3.0532e-08) SurfaceTension_loss: tensor(63049.
3320)
Iteration: 8000   Total Loss: tensor(9916656.)
IC Loss: tensor(0.0734)   BC Loss: tensor(8.5212e-05)   NS PDE Loss: tensor(94.8140)   NS Div Free
Loss: tensor(3.3643e-19)   Mv Bdry Jump_loss: tensor(1.7725e-07) SurfaceTension_loss: tensor(51622.
2031)
Iteration: 8200   Total Loss: tensor(2.5397e+08)
IC Loss: tensor(2.3122)   BC Loss: tensor(0.0003)   NS PDE Loss: tensor(94.2153)   NS Div Free
Loss: tensor(2.3518e-18)   Mv Bdry Jump_loss: tensor(8.9632e-07) SurfaceTension_loss: tensor(45490
7.0625)
Iteration: 8400   Total Loss: tensor(3260155.7500)
IC Loss: tensor(0.0263)   BC Loss: tensor(0.0002)   NS PDE Loss: tensor(93.8571)   NS Div Free
Loss: tensor(3.8028e-19)   Mv Bdry Jump_loss: tensor(6.5019e-08) SurfaceTension_loss: tensor(12607.
5312)
Iteration: 8600   Total Loss: tensor(5731389.5000)
IC Loss: tensor(0.0482)   BC Loss: tensor(4.3114e-05)   NS PDE Loss: tensor(94.4897)   NS Div Free
Loss: tensor(3.2711e-19)   Mv Bdry Jump_loss: tensor(2.9111e-08) SurfaceTension_loss: tensor(18205.
2305)
Iteration: 8800   Total Loss: tensor(8259797.5000)
IC Loss: tensor(0.0772)   BC Loss: tensor(1.5633e-05)   NS PDE Loss: tensor(95.0557)   NS Div Free
Loss: tensor(1.5569e-20)   Mv Bdry Jump_loss: tensor(7.5001e-09) SurfaceTension_loss: tensor(10842.
0586)
Iteration: 9000   Total Loss: tensor(5908099.5000)
IC Loss: tensor(0.0462)   BC Loss: tensor(9.3818e-06)   NS PDE Loss: tensor(94.4220)   NS Div Free
Loss: tensor(2.7312e-20)   Mv Bdry Jump_loss: tensor(1.2656e-08) SurfaceTension_loss: tensor(25772.
1875)
Iteration: 9200   Total Loss: tensor(4430261.)
IC Loss: tensor(0.0348)   BC Loss: tensor(2.4391e-05)   NS PDE Loss: tensor(94.8122)   NS Div Free
Loss: tensor(1.9127e-20)   Mv Bdry Jump_loss: tensor(1.0930e-07) SurfaceTension_loss: tensor(18933.
5410)
Iteration: 9400   Total Loss: tensor(7636407.)

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IC Loss:  tensor(0.0580)        BC Loss:  tensor(2.6535e-05)    NS PDE Loss:  tensor(94.0444)   NS Div Free
Loss:  tensor(3.5100e-19)       Mv Bdry Jump_loss:  tensor(8.8758e-10)  SurfaceTension_loss:  tensor(36739.
9062)
Iteration: 9600        Total Loss: tensor(6501595.5000)
IC Loss:  tensor(0.0420)        BC Loss:  tensor(4.2884e-06)    NS PDE Loss:  tensor(94.5773)   NS Div Free
Loss:  tensor(8.9352e-19)       Mv Bdry Jump_loss:  tensor(5.0035e-09)  SurfaceTension_loss:  tensor(46009.
2344)
Iteration: 9800        Total Loss: tensor(6337391.)
IC Loss:  tensor(0.0570)        BC Loss:  tensor(3.2222e-06)    NS PDE Loss:  tensor(94.7771)   NS Div Free
Loss:  tensor(1.2162e-19)       Mv Bdry Jump_loss:  tensor(7.0333e-10)  SurfaceTension_loss:  tensor(12648.
4951)
Iteration: 10000       Total Loss: tensor(10862716.)
IC Loss:  tensor(0.1023)        BC Loss:  tensor(3.4577e-06)    NS PDE Loss:  tensor(94.6170)   NS Div Free
Loss:  tensor(3.3034e-21)       Mv Bdry Jump_loss:  tensor(5.4994e-10)  SurfaceTension_loss:  tensor(12565.
9014)
Iteration: 10200       Total Loss: tensor(34671348.)
IC Loss:  tensor(0.3341)        BC Loss:  tensor(5.3216e-06)    NS PDE Loss:  tensor(95.2834)   NS Div Free
Loss:  tensor(3.2924e-20)       Mv Bdry Jump_loss:  tensor(3.5402e-09)  SurfaceTension_loss:  tensor(25309.
3516)
Iteration: 10400       Total Loss: tensor(4143008.5000)
IC Loss:  tensor(0.0351)        BC Loss:  tensor(4.4980e-06)    NS PDE Loss:  tensor(95.0000)   NS Div Free
Loss:  tensor(4.7405e-20)       Mv Bdry Jump_loss:  tensor(1.0229e-09)  SurfaceTension_loss:  tensor(12649.
0693)
Iteration: 10600       Total Loss: tensor(6647267.)
IC Loss:  tensor(0.0535)        BC Loss:  tensor(0.0001)        NS PDE Loss:  tensor(94.8674)   NS Div Free
Loss:  tensor(1.2737e-18)       Mv Bdry Jump_loss:  tensor(3.0257e-07)  SurfaceTension_loss:  tensor(25956.
2520)
Iteration: 10800       Total Loss: tensor(93517144.)
IC Loss:  tensor(0.8828)        BC Loss:  tensor(4.8714e-05)    NS PDE Loss:  tensor(94.6281)   NS Div Free
Loss:  tensor(1.3173e-17)       Mv Bdry Jump_loss:  tensor(5.8401e-07)  SurfaceTension_loss:  tensor(10464
6.3672)
Iteration: 11000       Total Loss: tensor(25556904.)
IC Loss:  tensor(0.2463)        BC Loss:  tensor(7.5795e-05)    NS PDE Loss:  tensor(95.4809)   NS Div Free
Loss:  tensor(4.4377e-19)       Mv Bdry Jump_loss:  tensor(1.0137e-07)  SurfaceTension_loss:  tensor(18577.
6582)
Iteration: 11200       Total Loss: tensor(67334192.)
IC Loss:  tensor(0.6554)        BC Loss:  tensor(0.0001)        NS PDE Loss:  tensor(95.0485)   NS Div Free
Loss:  tensor(3.4180e-19)       Mv Bdry Jump_loss:  tensor(8.5902e-08)  SurfaceTension_loss:  tensor(35810.
8242)
Iteration: 11400       Total Loss: tensor(37824212.)
IC Loss:  tensor(0.3702)        BC Loss:  tensor(5.2353e-05)    NS PDE Loss:  tensor(95.4354)   NS Div Free
Loss:  tensor(7.9874e-19)       Mv Bdry Jump_loss:  tensor(1.3400e-07)  SurfaceTension_loss:  tensor(16128.
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1914)
Iteration: 11600   Total Loss: tensor(8293475.)
IC Loss: tensor(0.0749)   BC Loss: tensor(3.8639e-05)   NS PDE Loss: tensor(95.1600)   NS Div Free
Loss: tensor(3.9728e-19)   Mv Bdry Jump_loss: tensor(9.2869e-08) SurfaceTension_loss: tensor(16067.
0605)
Iteration: 11800   Total Loss: tensor(87393696.)
IC Loss: tensor(0.8648)   BC Loss: tensor(6.2180e-05)   NS PDE Loss: tensor(94.6895)   NS Div Free
Loss: tensor(1.9976e-18)   Mv Bdry Jump_loss: tensor(1.6818e-07) SurfaceTension_loss: tensor(18193.
9258)
Iteration: 12000   Total Loss: tensor(8531075.)
IC Loss: tensor(0.0812)   BC Loss: tensor(4.8868e-05)   NS PDE Loss: tensor(95.1177)   NS Div Free
Loss: tensor(2.1171e-18)   Mv Bdry Jump_loss: tensor(6.9334e-08) SurfaceTension_loss: tensor(8280.1
621)
Iteration: 12200   Total Loss: tensor(84794392.)
IC Loss: tensor(0.8228)   BC Loss: tensor(4.9402e-05)   NS PDE Loss: tensor(94.7134)   NS Div Free
Loss: tensor(5.3467e-19)   Mv Bdry Jump_loss: tensor(2.5639e-07) SurfaceTension_loss: tensor(50298.
5312)
Iteration: 12400   Total Loss: tensor(28439476.)
IC Loss: tensor(0.2727)   BC Loss: tensor(5.5021e-05)   NS PDE Loss: tensor(95.0531)   NS Div Free
Loss: tensor(5.1201e-18)   Mv Bdry Jump_loss: tensor(1.1655e-07) SurfaceTension_loss: tensor(23459.
6738)
Iteration: 12600   Total Loss: tensor(4765383.)
IC Loss: tensor(0.0436)   BC Loss: tensor(3.9414e-05)   NS PDE Loss: tensor(95.1487)   NS Div Free
Loss: tensor(2.4551e-19)   Mv Bdry Jump_loss: tensor(2.4663e-08) SurfaceTension_loss: tensor(8115.4
453)
Iteration: 12800   Total Loss: tensor(7372574.5000)
IC Loss: tensor(0.0597)   BC Loss: tensor(0.0001)   NS PDE Loss: tensor(94.9547)   NS Div Free
Loss: tensor(3.9121e-19)   Mv Bdry Jump_loss: tensor(1.3566e-07) SurfaceTension_loss: tensor(28038.
4805)
Iteration: 13000   Total Loss: tensor(8171876.5000)
IC Loss: tensor(0.0777)   BC Loss: tensor(0.0001)   NS PDE Loss: tensor(94.8971)   NS Div Free
Loss: tensor(8.1671e-16)   Mv Bdry Jump_loss: tensor(1.0401e-07) SurfaceTension_loss: tensor(8029.8
594)
Iteration: 13200   Total Loss: tensor(16089509.)
IC Loss: tensor(0.1564)   BC Loss: tensor(0.0004)   NS PDE Loss: tensor(95.2869)   NS Div Free
Loss: tensor(3.8263e-18)   Mv Bdry Jump_loss: tensor(2.6818e-07) SurfaceTension_loss: tensor(9029.5
645)
Iteration: 13400   Total Loss: tensor(56652104.)
IC Loss: tensor(0.5433)   BC Loss: tensor(0.0002)   NS PDE Loss: tensor(95.2533)   NS Div Free
Loss: tensor(2.0827e-16)   Mv Bdry Jump_loss: tensor(1.7727e-07) SurfaceTension_loss: tensor(46402.
5977)
Iteration: 13600   Total Loss: tensor(2567618.7500)

IC Loss: tensor(0.0224)   BC Loss: tensor(0.0002)   NS PDE Loss: tensor(94.5060)   NS Div Free
Loss: tensor(1.3493e-15)   Mv Bdry Jump_loss: tensor(5.1837e-08) SurfaceTension_loss: tensor(6611.1
592)
Iteration: 13800   Total Loss: tensor(20857526.)
IC Loss: tensor(0.1862)   BC Loss: tensor(0.0002)   NS PDE Loss: tensor(94.4735)   NS Div Free
Loss: tensor(2.8569e-17)   Mv Bdry Jump_loss: tensor(1.8444e-07) SurfaceTension_loss: tensor(44719.
8203)
Iteration: 14000   Total Loss: tensor(92551408.)
IC Loss: tensor(0.8626)   BC Loss: tensor(0.0002)   NS PDE Loss: tensor(94.9957)   NS Div Free
Loss: tensor(2.3465e-18)   Mv Bdry Jump_loss: tensor(4.9810e-07) SurfaceTension_loss: tensor(12587
3.3359)
Iteration: 14200   Total Loss: tensor(13502529.)
IC Loss: tensor(0.1209)   BC Loss: tensor(0.0002)   NS PDE Loss: tensor(95.2801)   NS Div Free
Loss: tensor(5.8048e-18)   Mv Bdry Jump_loss: tensor(2.2842e-07) SurfaceTension_loss: tensor(28338.
0449)
Iteration: 14400   Total Loss: tensor(52793148.)
IC Loss: tensor(0.5214)   BC Loss: tensor(0.0002)   NS PDE Loss: tensor(94.9975)   NS Div Free
Loss: tensor(1.3873e-16)   Mv Bdry Jump_loss: tensor(1.7357e-07) SurfaceTension_loss: tensor(13055.
7578)
Iteration: 14600   Total Loss: tensor(17179174.)
IC Loss: tensor(0.1661)   BC Loss: tensor(0.0001)   NS PDE Loss: tensor(95.2666)   NS Div Free
Loss: tensor(8.4168e-22)   Mv Bdry Jump_loss: tensor(2.8180e-10) SurfaceTension_loss: tensor(11398.
5186)
Iteration: 14800   Total Loss: tensor(7416767.)
IC Loss: tensor(0.0649)   BC Loss: tensor(9.8589e-05)   NS PDE Loss: tensor(95.1956)   NS Div Free
Loss: tensor(2.6718e-21)   Mv Bdry Jump_loss: tensor(2.8167e-10) SurfaceTension_loss: tensor(18628.
2461)
Iteration: 15000   Total Loss: tensor(7878357.5000)
IC Loss: tensor(0.0639)   BC Loss: tensor(0.0001)   NS PDE Loss: tensor(94.5925)   NS Div Free
Loss: tensor(6.9694e-21)   Mv Bdry Jump_loss: tensor(6.3859e-09) SurfaceTension_loss: tensor(29828.
0078)
Iteration: 15200   Total Loss: tensor(47068520.)
IC Loss: tensor(0.2598)   BC Loss: tensor(9.3203e-05)   NS PDE Loss: tensor(95.1176)   NS Div Free
Loss: tensor(2.0137e-20)   Mv Bdry Jump_loss: tensor(2.3265e-09) SurfaceTension_loss: tensor(42181
2.9375)
Iteration: 15400   Total Loss: tensor(1.5723e+09)
IC Loss: tensor(0.2163)   BC Loss: tensor(2.2856e-05)   NS PDE Loss: tensor(95.2128)   NS Div Free
Loss: tensor(1.2069e-20)   Mv Bdry Jump_loss: tensor(3.0507e-10) SurfaceTension_loss: tensor(310128
90.)
Iteration: 15600   Total Loss: tensor(44560460.)
IC Loss: tensor(0.4331)   BC Loss: tensor(2.9558e-06)   NS PDE Loss: tensor(95.3276)   NS Div Free
Loss: tensor(1.3225e-20)   Mv Bdry Jump_loss: tensor(8.9855e-11) SurfaceTension_loss: tensor(25028.

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3320)
Iteration: 15800      Total Loss: tensor(1.6037e+08)
IC Loss: tensor(1.1044)      BC Loss: tensor(3.8433e-06)    NS PDE Loss: tensor(93.3985)    NS Div Free
Loss: tensor(1.2429e-20)      Mv Bdry Jump_loss: tensor(1.8425e-11) SurfaceTension_loss: tensor(99860
0.3125)
Iteration: 16000      Total Loss: tensor(40410280.)
IC Loss: tensor(0.3993)      BC Loss: tensor(2.7172e-06)    NS PDE Loss: tensor(95.3761)    NS Div Free
Loss: tensor(2.8471e-21)      Mv Bdry Jump_loss: tensor(7.9945e-11) SurfaceTension_loss: tensor(9508.0
654)
Iteration: 16200      Total Loss: tensor(1.4975e+08)
IC Loss: tensor(1.2248)      BC Loss: tensor(0.0001)      NS PDE Loss: tensor(95.0190)    NS Div Free
Loss: tensor(1.3369e-20)      Mv Bdry Jump_loss: tensor(3.2143e-08) SurfaceTension_loss: tensor(54547
8.3750)
Iteration: 16400      Total Loss: tensor(3436154.)
IC Loss: tensor(0.0308)      BC Loss: tensor(7.0826e-05)    NS PDE Loss: tensor(94.8438)    NS Div Free
Loss: tensor(2.6965e-19)      Mv Bdry Jump_loss: tensor(5.3502e-09) SurfaceTension_loss: tensor(7178.1
606)
Iteration: 16600      Total Loss: tensor(59793860.)
IC Loss: tensor(0.5834)      BC Loss: tensor(5.6806e-05)    NS PDE Loss: tensor(95.1665)    NS Div Free
Loss: tensor(2.2163e-20)      Mv Bdry Jump_loss: tensor(1.7671e-10) SurfaceTension_loss: tensor(29132.
1758)
Iteration: 16800      Total Loss: tensor(5191220.5000)
IC Loss: tensor(0.0296)      BC Loss: tensor(6.3422e-06)    NS PDE Loss: tensor(94.5225)    NS Div Free
Loss: tensor(5.9249e-22)      Mv Bdry Jump_loss: tensor(2.5539e-10) SurfaceTension_loss: tensor(44584.
7734)
Iteration: 17000      Total Loss: tensor(4888816.)
IC Loss: tensor(0.0453)      BC Loss: tensor(5.2925e-06)    NS PDE Loss: tensor(94.9529)    NS Div Free
Loss: tensor(1.0156e-22)      Mv Bdry Jump_loss: tensor(9.1631e-12) SurfaceTension_loss: tensor(7155.3
926)
Iteration: 17200      Total Loss: tensor(5374488.)
IC Loss: tensor(0.0509)      BC Loss: tensor(9.8665e-06)    NS PDE Loss: tensor(95.1166)    NS Div Free
Loss: tensor(1.3026e-22)      Mv Bdry Jump_loss: tensor(5.7120e-11) SurfaceTension_loss: tensor(5723.2
705)
Iteration: 17400      Total Loss: tensor(65968428.)
IC Loss: tensor(0.6552)      BC Loss: tensor(1.8602e-05)    NS PDE Loss: tensor(95.1555)    NS Div Free
Loss: tensor(8.9194e-22)      Mv Bdry Jump_loss: tensor(2.8796e-09) SurfaceTension_loss: tensor(9000.6
514)
Iteration: 17600      Total Loss: tensor(11488385.)
IC Loss: tensor(0.0334)      BC Loss: tensor(1.3989e-05)    NS PDE Loss: tensor(94.9061)    NS Div Free
Loss: tensor(6.3576e-21)      Mv Bdry Jump_loss: tensor(2.3294e-09) SurfaceTension_loss: tensor(16286
6.4062)
Iteration: 17800      Total Loss: tensor(51435068.)
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IC Loss: tensor(0.5048)   BC Loss: tensor(1.1852e-05)   NS PDE Loss: tensor(95.3489)   NS Div Free
Loss: tensor(2.2297e-22)   Mv Bdry Jump_loss: tensor(4.9028e-10) SurfaceTension_loss: tensor(19098.
7090)
Iteration: 18000   Total Loss: tensor(10955525.)
IC Loss: tensor(0.0862)   BC Loss: tensor(5.6772e-06)   NS PDE Loss: tensor(95.0424)   NS Div Free
Loss: tensor(1.6812e-21)   Mv Bdry Jump_loss: tensor(6.0000e-09) SurfaceTension_loss: tensor(46721.
1641)
Iteration: 18200   Total Loss: tensor(12199220.)
IC Loss: tensor(0.1148)   BC Loss: tensor(6.0807e-06)   NS PDE Loss: tensor(95.0023)   NS Div Free
Loss: tensor(1.5366e-22)   Mv Bdry Jump_loss: tensor(1.9131e-10) SurfaceTension_loss: tensor(14406.
6133)
Iteration: 18400   Total Loss: tensor(27298250.)
IC Loss: tensor(0.2642)   BC Loss: tensor(4.9822e-06)   NS PDE Loss: tensor(95.2654)   NS Div Free
Loss: tensor(2.4730e-23)   Mv Bdry Jump_loss: tensor(3.0359e-10) SurfaceTension_loss: tensor(17475.
6914)
Iteration: 18600   Total Loss: tensor(9264465.)
IC Loss: tensor(0.0758)   BC Loss: tensor(3.6418e-06)   NS PDE Loss: tensor(95.2995)   NS Div Free
Loss: tensor(2.7614e-21)   Mv Bdry Jump_loss: tensor(8.3073e-10) SurfaceTension_loss: tensor(33696.
0156)
Iteration: 18800   Total Loss: tensor(1.2025e+08)
IC Loss: tensor(1.1839)   BC Loss: tensor(2.4004e-06)   NS PDE Loss: tensor(94.7733)   NS Div Free
Loss: tensor(1.5488e-22)   Mv Bdry Jump_loss: tensor(2.9220e-10) SurfaceTension_loss: tensor(37332.
6094)
Iteration: 19000   Total Loss: tensor(58722932.)
IC Loss: tensor(0.5758)   BC Loss: tensor(0.0006)   NS PDE Loss: tensor(95.1506)   NS Div Free
Loss: tensor(5.8588e-23)   Mv Bdry Jump_loss: tensor(5.2756e-09) SurfaceTension_loss: tensor(22842.
5625)
Iteration: 19200   Total Loss: tensor(2792059.5000)
IC Loss: tensor(0.0260)   BC Loss: tensor(2.9576e-06)   NS PDE Loss: tensor(95.4803)   NS Div Free
Loss: tensor(5.2182e-24)   Mv Bdry Jump_loss: tensor(8.9461e-11) SurfaceTension_loss: tensor(3748.9
795)
Iteration: 19400   Total Loss: tensor(48430152.)
IC Loss: tensor(0.2303)   BC Loss: tensor(7.2522e-06)   NS PDE Loss: tensor(95.3065)   NS Div Free
Loss: tensor(1.4605e-21)   Mv Bdry Jump_loss: tensor(3.8803e-09) SurfaceTension_loss: tensor(50798
7.2812)
Iteration: 19600   Total Loss: tensor(3506041.5000)
IC Loss: tensor(0.0309)   BC Loss: tensor(1.1502e-06)   NS PDE Loss: tensor(95.0468)   NS Div Free
Loss: tensor(5.1135e-22)   Mv Bdry Jump_loss: tensor(1.6953e-10) SurfaceTension_loss: tensor(8260.6
328)
Iteration: 19800   Total Loss: tensor(10702309.)
IC Loss: tensor(0.0955)   BC Loss: tensor(7.6536e-07)   NS PDE Loss: tensor(95.1974)   NS Div Free
Loss: tensor(4.4933e-22)   Mv Bdry Jump_loss: tensor(1.6080e-09) SurfaceTension_loss: tensor(23135.

6387)
Iteration: 20000   Total Loss: tensor(2.5513e+08)
IC Loss: tensor(1.3519)   BC Loss: tensor(9.2197e-06)   NS PDE Loss: tensor(94.3879)   NS Div Free
Loss: tensor(4.3969e-22)   Mv Bdry Jump_loss: tensor(5.2390e-10) SurfaceTension_loss: tensor(239869
3.)
Iteration: 20200   Total Loss: tensor(63915172.)
IC Loss: tensor(0.2447)   BC Loss: tensor(1.2642e-06)   NS PDE Loss: tensor(95.4236)   NS Div Free
Loss: tensor(3.3892e-22)   Mv Bdry Jump_loss: tensor(9.7395e-10) SurfaceTension_loss: tensor(78885
1.7500)
Iteration: 20400   Total Loss: tensor(3.9242e+08)
IC Loss: tensor(0.1093)   BC Loss: tensor(1.7725e-06)   NS PDE Loss: tensor(94.3715)   NS Div Free
Loss: tensor(1.3775e-20)   Mv Bdry Jump_loss: tensor(2.7935e-09) SurfaceTension_loss: tensor(762970
4.5000)
Iteration: 20600   Total Loss: tensor(4320759.)
IC Loss: tensor(0.0376)   BC Loss: tensor(1.6159e-06)   NS PDE Loss: tensor(94.8463)   NS Div Free
Loss: tensor(2.6893e-21)   Mv Bdry Jump_loss: tensor(1.0722e-09) SurfaceTension_loss: tensor(11189.
7578)
Iteration: 20800   Total Loss: tensor(36274816.)
IC Loss: tensor(0.3547)   BC Loss: tensor(3.7156e-06)   NS PDE Loss: tensor(95.2661)   NS Div Free
Loss: tensor(4.1600e-23)   Mv Bdry Jump_loss: tensor(6.1125e-10) SurfaceTension_loss: tensor(16108.
7676)
Iteration: 21000   Total Loss: tensor(5924239.)
IC Loss: tensor(0.0540)   BC Loss: tensor(2.0401e-06)   NS PDE Loss: tensor(95.4646)   NS Div Free
Loss: tensor(3.1347e-23)   Mv Bdry Jump_loss: tensor(1.1025e-09) SurfaceTension_loss: tensor(10520.
0762)
Iteration: 21200   Total Loss: tensor(4599896.5000)
IC Loss: tensor(0.0324)   BC Loss: tensor(1.8540e-06)   NS PDE Loss: tensor(95.1515)   NS Div Free
Loss: tensor(3.1474e-22)   Mv Bdry Jump_loss: tensor(1.9508e-10) SurfaceTension_loss: tensor(27288.
2070)
Iteration: 21400   Total Loss: tensor(24647436.)
IC Loss: tensor(0.2303)   BC Loss: tensor(7.3008e-07)   NS PDE Loss: tensor(95.3240)   NS Div Free
Loss: tensor(8.6138e-24)   Mv Bdry Jump_loss: tensor(6.3889e-11) SurfaceTension_loss: tensor(32424.
7422)
Iteration: 21600   Total Loss: tensor(97833264.)
IC Loss: tensor(0.9672)   BC Loss: tensor(6.5934e-07)   NS PDE Loss: tensor(95.1357)   NS Div Free
Loss: tensor(2.5157e-24)   Mv Bdry Jump_loss: tensor(5.3898e-11) SurfaceTension_loss: tensor(22177.
5137)
Iteration: 21800   Total Loss: tensor(94948232.)
IC Loss: tensor(0.9309)   BC Loss: tensor(7.0856e-07)   NS PDE Loss: tensor(94.3129)   NS Div Free
Loss: tensor(2.4466e-20)   Mv Bdry Jump_loss: tensor(8.6169e-11) SurfaceTension_loss: tensor(37163.
5234)
Iteration: 22000   Total Loss: tensor(7373150.5000)

IC Loss: tensor(0.0684)   BC Loss: tensor(7.0902e-07)   NS PDE Loss: tensor(95.5189)   NS Div Free Loss: tensor(7.4284e-22)   Mv Bdry Jump_loss: tensor(4.3510e-11) SurfaceTension_loss: tensor(10648.1211)
Iteration: 22200   Total Loss: tensor(3535645.)
IC Loss: tensor(0.0274)   BC Loss: tensor(6.6554e-07)   NS PDE Loss: tensor(95.2503)   NS Div Free Loss: tensor(7.7629e-22)   Mv Bdry Jump_loss: tensor(3.4565e-11) SurfaceTension_loss: tensor(15936.6094)
Iteration: 22400   Total Loss: tensor(4891625.5000)
IC Loss: tensor(0.0212)   BC Loss: tensor(7.0368e-07)   NS PDE Loss: tensor(94.6898)   NS Div Free Loss: tensor(1.0627e-21)   Mv Bdry Jump_loss: tensor(7.2682e-11) SurfaceTension_loss: tensor(55353.4766)
Iteration: 22600   Total Loss: tensor(5079312.5000)
IC Loss: tensor(0.0452)   BC Loss: tensor(6.4430e-07)   NS PDE Loss: tensor(95.5156)   NS Div Free Loss: tensor(7.0738e-24)   Mv Bdry Jump_loss: tensor(5.2224e-11) SurfaceTension_loss: tensor(11235.6035)
Iteration: 22800   Total Loss: tensor(8353312.5000)
IC Loss: tensor(0.0755)   BC Loss: tensor(5.8268e-07)   NS PDE Loss: tensor(94.9848)   NS Div Free Loss: tensor(1.4725e-23)   Mv Bdry Jump_loss: tensor(7.8330e-11) SurfaceTension_loss: tensor(16000.3418)
Iteration: 23000   Total Loss: tensor(23653168.)
IC Loss: tensor(0.2327)   BC Loss: tensor(5.9530e-07)   NS PDE Loss: tensor(95.4149)   NS Div Free Loss: tensor(7.1413e-23)   Mv Bdry Jump_loss: tensor(3.3825e-11) SurfaceTension_loss: tensor(7735.3257)
Iteration: 23200   Total Loss: tensor(16662295.)
IC Loss: tensor(0.1569)   BC Loss: tensor(6.0817e-07)   NS PDE Loss: tensor(95.2504)   NS Div Free Loss: tensor(2.7273e-22)   Mv Bdry Jump_loss: tensor(2.1821e-11) SurfaceTension_loss: tensor(19372.6973)
Iteration: 23400   Total Loss: tensor(71031280.)
IC Loss: tensor(0.6945)   BC Loss: tensor(6.7368e-07)   NS PDE Loss: tensor(94.6507)   NS Div Free Loss: tensor(2.0619e-24)   Mv Bdry Jump_loss: tensor(7.7013e-12) SurfaceTension_loss: tensor(31614.3789)
Iteration: 23600   Total Loss: tensor(5119759.5000)
IC Loss: tensor(0.0365)   BC Loss: tensor(7.7533e-07)   NS PDE Loss: tensor(95.0538)   NS Div Free Loss: tensor(5.1821e-23)   Mv Bdry Jump_loss: tensor(7.0736e-12) SurfaceTension_loss: tensor(29321.6719)
Iteration: 23800   Total Loss: tensor(2064269.5000)
IC Loss: tensor(0.0150)   BC Loss: tensor(5.3590e-07)   NS PDE Loss: tensor(95.0494)   NS Div Free Loss: tensor(1.0702e-22)   Mv Bdry Jump_loss: tensor(2.4172e-11) SurfaceTension_loss: tensor(11234.3076)
Iteration: 24000   Total Loss: tensor(45718424.)
IC Loss: tensor(0.4523)   BC Loss: tensor(6.0784e-07)   NS PDE Loss: tensor(95.4122)   NS Div Free Loss: tensor(2.1589e-23)   Mv Bdry Jump_loss: tensor(6.6554e-12) SurfaceTension_loss: tensor(9763.9

697)
Iteration: 24200   Total Loss: tensor(54122024.)
IC Loss: tensor(0.5268)   BC Loss: tensor(7.3382e-07)   NS PDE Loss: tensor(95.5214)   NS Div Free
Loss: tensor(5.6743e-26)   Mv Bdry Jump_loss: tensor(7.0943e-12) SurfaceTension_loss: tensor(28742.
5391)
Iteration: 24400   Total Loss: tensor(10757123.)
IC Loss: tensor(0.0962)   BC Loss: tensor(6.2473e-07)   NS PDE Loss: tensor(95.2682)   NS Div Free
Loss: tensor(3.9385e-22)   Mv Bdry Jump_loss: tensor(2.0937e-11) SurfaceTension_loss: tensor(22697.
6289)
Iteration: 24600   Total Loss: tensor(13393336.)
IC Loss: tensor(0.1288)   BC Loss: tensor(5.6683e-07)   NS PDE Loss: tensor(95.3546)   NS Div Free
Loss: tensor(1.4805e-23)   Mv Bdry Jump_loss: tensor(1.7761e-11) SurfaceTension_loss: tensor(10225.
0039)
Iteration: 24800   Total Loss: tensor(21118834.)
IC Loss: tensor(0.2018)   BC Loss: tensor(3.5907e-05)   NS PDE Loss: tensor(95.2715)   NS Div Free
Loss: tensor(2.4370e-25)   Mv Bdry Jump_loss: tensor(1.1961e-12) SurfaceTension_loss: tensor(18692.
3789)
Iteration: 25000   Total Loss: tensor(2823038.)
IC Loss: tensor(0.0249)   BC Loss: tensor(1.3508e-07)   NS PDE Loss: tensor(95.0724)   NS Div Free
Loss: tensor(5.9759e-22)   Mv Bdry Jump_loss: tensor(1.4148e-12) SurfaceTension_loss: tensor(6703.5
566)
Iteration: 25200   Total Loss: tensor(2713893.2500)
IC Loss: tensor(0.0239)   BC Loss: tensor(1.5145e-07)   NS PDE Loss: tensor(95.3254)   NS Div Free
Loss: tensor(1.8770e-25)   Mv Bdry Jump_loss: tensor(4.5385e-13) SurfaceTension_loss: tensor(6378.6
680)
Iteration: 25400   Total Loss: tensor(20435606.)
IC Loss: tensor(0.1629)   BC Loss: tensor(4.9966e-06)   NS PDE Loss: tensor(95.2166)   NS Div Free
Loss: tensor(4.7593e-27)   Mv Bdry Jump_loss: tensor(1.3244e-11) SurfaceTension_loss: tensor(82810.
9219)
Iteration: 25600   Total Loss: tensor(67224936.)
IC Loss: tensor(0.6540)   BC Loss: tensor(2.0774e-07)   NS PDE Loss: tensor(95.3918)   NS Div Free
Loss: tensor(1.7316e-24)   Mv Bdry Jump_loss: tensor(1.1041e-11) SurfaceTension_loss: tensor(36470.
4180)
Iteration: 25800   Total Loss: tensor(14645195.)
IC Loss: tensor(0.0321)   BC Loss: tensor(1.7054e-07)   NS PDE Loss: tensor(95.4074)   NS Div Free
Loss: tensor(1.7051e-26)   Mv Bdry Jump_loss: tensor(6.9259e-13) SurfaceTension_loss: tensor(22873
9.5938)
Iteration: 26000   Total Loss: tensor(50401076.)
IC Loss: tensor(0.1086)   BC Loss: tensor(1.9377e-07)   NS PDE Loss: tensor(95.2758)   NS Div Free
Loss: tensor(1.9966e-24)   Mv Bdry Jump_loss: tensor(8.0421e-11) SurfaceTension_loss: tensor(79087
3.6875)
Iteration: 26200   Total Loss: tensor(53720792.)

IC Loss: tensor(0.5246)   BC Loss: tensor(1.7228e-07)   NS PDE Loss: tensor(95.0502)   NS Div Free
Loss: tensor(1.1614e-25)   Mv Bdry Jump_loss: tensor(5.2526e-12) SurfaceTension_loss: tensor(25222.
7031)
Iteration: 26400   Total Loss: tensor(1719791.3750)
IC Loss: tensor(0.0147)   BC Loss: tensor(2.3440e-06)   NS PDE Loss: tensor(95.3337)   NS Div Free
Loss: tensor(4.9364e-26)   Mv Bdry Jump_loss: tensor(2.3382e-12) SurfaceTension_loss: tensor(5016.7
744)
Iteration: 26600   Total Loss: tensor(679519.1875)
IC Loss: tensor(0.0057)   BC Loss: tensor(2.4689e-08)   NS PDE Loss: tensor(95.4279)   NS Div Free
Loss: tensor(1.6368e-29)   Mv Bdry Jump_loss: tensor(1.9243e-15) SurfaceTension_loss: tensor(2234.9
446)
Iteration: 26800   Total Loss: tensor(2.2760e+08)
IC Loss: tensor(0.1469)   BC Loss: tensor(5.1532e-11)   NS PDE Loss: tensor(93.1196)   NS Div Free
Loss: tensor(4.4333e-27)   Mv Bdry Jump_loss: tensor(1.5656e-14) SurfaceTension_loss: tensor(425807
5.5000)
Iteration: 27000   Total Loss: tensor(18130162.)
IC Loss: tensor(0.1287)   BC Loss: tensor(4.8962e-11)   NS PDE Loss: tensor(95.3093)   NS Div Free
Loss: tensor(9.3014e-29)   Mv Bdry Jump_loss: tensor(6.8343e-15) SurfaceTension_loss: tensor(10516
1.8906)
Iteration: 27200   Total Loss: tensor(1965667.1250)
IC Loss: tensor(0.0182)   BC Loss: tensor(4.6247e-11)   NS PDE Loss: tensor(95.6924)   NS Div Free
Loss: tensor(3.7644e-29)   Mv Bdry Jump_loss: tensor(7.2141e-16) SurfaceTension_loss: tensor(2816.8
464)
Iteration: 27400   Total Loss: tensor(353937.6875)
IC Loss: tensor(0.0032)   BC Loss: tensor(3.2804e-11)   NS PDE Loss: tensor(95.7810)   NS Div Free
Loss: tensor(1.1553e-30)   Mv Bdry Jump_loss: tensor(1.3417e-16) SurfaceTension_loss: tensor(711.38
05)
Iteration: 27600   Total Loss: tensor(174777.6719)
IC Loss: tensor(0.0015)   BC Loss: tensor(1.7357e-05)   NS PDE Loss: tensor(95.8114)   NS Div Free
Loss: tensor(6.4176e-31)   Mv Bdry Jump_loss: tensor(1.8255e-15) SurfaceTension_loss: tensor(539.35
13)
Iteration: 27800   Total Loss: tensor(125255.3594)
IC Loss: tensor(0.0009)   BC Loss: tensor(3.5343e-05)   NS PDE Loss: tensor(95.8121)   NS Div Free
Loss: tensor(1.4385e-29)   Mv Bdry Jump_loss: tensor(4.5446e-15) SurfaceTension_loss: tensor(681.91
54)
Iteration: 28000   Total Loss: tensor(83291.2734)
IC Loss: tensor(0.0006)   BC Loss: tensor(1.3846e-08)   NS PDE Loss: tensor(95.8692)   NS Div Free
Loss: tensor(1.6040e-30)   Mv Bdry Jump_loss: tensor(5.4343e-15) SurfaceTension_loss: tensor(454.42
10)
Iteration: 28200   Total Loss: tensor(40434144.)
IC Loss: tensor(0.3345)   BC Loss: tensor(1.1233e-08)   NS PDE Loss: tensor(95.1933)   NS Div Free
Loss: tensor(8.4677e-28)   Mv Bdry Jump_loss: tensor(8.6190e-13) SurfaceTension_loss: tensor(13962

3.2812)
Iteration: 28400   Total Loss: tensor(46047124.)
IC Loss: tensor(0.3739)   BC Loss: tensor(1.1604e-08)   NS PDE Loss: tensor(95.3172)   NS Div Free
Loss: tensor(2.8523e-29)   Mv Bdry Jump_loss: tensor(7.9251e-14) SurfaceTension_loss: tensor(17322
9.0469)
Iteration: 28600   Total Loss: tensor(1.0067e+08)
IC Loss: tensor(0.7835)   BC Loss: tensor(1.1978e-08)   NS PDE Loss: tensor(95.3305)   NS Div Free
Loss: tensor(3.0251e-28)   Mv Bdry Jump_loss: tensor(5.6838e-13) SurfaceTension_loss: tensor(44647
5.6562)
Iteration: 28800   Total Loss: tensor(6644519.5000)
IC Loss: tensor(0.0363)   BC Loss: tensor(1.1265e-08)   NS PDE Loss: tensor(95.7487)   NS Div Free
Loss: tensor(2.0091e-30)   Mv Bdry Jump_loss: tensor(1.3229e-14) SurfaceTension_loss: tensor(60315.
6016)
Iteration: 29000   Total Loss: tensor(1.2455e+08)
IC Loss: tensor(0.6097)   BC Loss: tensor(1.1253e-08)   NS PDE Loss: tensor(95.4772)   NS Div Free
Loss: tensor(3.0259e-31)   Mv Bdry Jump_loss: tensor(6.1416e-15) SurfaceTension_loss: tensor(127156
2.3750)
Iteration: 29200   Total Loss: tensor(3464195.2500)
IC Loss: tensor(0.0297)   BC Loss: tensor(9.4860e-09)   NS PDE Loss: tensor(95.5216)   NS Div Free
Loss: tensor(2.6857e-29)   Mv Bdry Jump_loss: tensor(1.4464e-13) SurfaceTension_loss: tensor(9797.8
213)
Iteration: 29400   Total Loss: tensor(981597.6250)
IC Loss: tensor(0.0079)   BC Loss: tensor(6.4589e-09)   NS PDE Loss: tensor(95.6136)   NS Div Free
Loss: tensor(7.6720e-29)   Mv Bdry Jump_loss: tensor(5.2194e-14) SurfaceTension_loss: tensor(3739.5
093)
Iteration: 29600   Total Loss: tensor(554339.6250)
IC Loss: tensor(0.0037)   BC Loss: tensor(4.2888e-09)   NS PDE Loss: tensor(95.6407)   NS Div Free
Loss: tensor(2.1940e-28)   Mv Bdry Jump_loss: tensor(8.9223e-14) SurfaceTension_loss: tensor(3768.2
749)
Iteration: 29800   Total Loss: tensor(237144.3438)
IC Loss: tensor(0.0012)   BC Loss: tensor(4.0780e-09)   NS PDE Loss: tensor(95.7148)   NS Div Free
Loss: tensor(2.6985e-27)   Mv Bdry Jump_loss: tensor(2.7555e-13) SurfaceTension_loss: tensor(2265.1
270)
Iteration: 30000   Total Loss: tensor(133750.7812)
IC Loss: tensor(0.0005)   BC Loss: tensor(1.9941e-05)   NS PDE Loss: tensor(95.7499)   NS Div Free
Loss: tensor(1.5981e-26)   Mv Bdry Jump_loss: tensor(1.0665e-12) SurfaceTension_loss: tensor(1654.4
116)
Iteration: 30200   Total Loss: tensor(72247.1172)
IC Loss: tensor(0.0002)   BC Loss: tensor(2.9929e-06)   NS PDE Loss: tensor(95.7814)   NS Div Free
Loss: tensor(2.9991e-27)   Mv Bdry Jump_loss: tensor(4.4329e-14) SurfaceTension_loss: tensor(1001.5
498)
Iteration: 30400   Total Loss: tensor(56658.7656)

IC Loss: tensor(0.0001)   BC Loss: tensor(5.5355e-10)   NS PDE Loss: tensor(95.7789)   NS Div Free
Loss: tensor(9.1297e-28)   Mv Bdry Jump_loss: tensor(3.7989e-14) SurfaceTension_loss: tensor(918.82
01)
Iteration: 30600   Total Loss: tensor(33476.9023)
IC Loss: tensor(6.5704e-05)   BC Loss: tensor(3.3103e-10)   NS PDE Loss: tensor(95.8299)   NS Div Free
Loss: tensor(1.9155e-28)   Mv Bdry Jump_loss: tensor(2.0315e-14) SurfaceTension_loss: tensor(536.21
40)
Iteration: 30800   Total Loss: tensor(23826.7246)
IC Loss: tensor(3.9617e-05)   BC Loss: tensor(2.4158e-07)   NS PDE Loss: tensor(95.8542)   NS Div Free
Loss: tensor(2.1195e-30)   Mv Bdry Jump_loss: tensor(2.0813e-16) SurfaceTension_loss: tensor(395.38
37)
Iteration: 31000   Total Loss: tensor(22130.4102)
IC Loss: tensor(4.2664e-05)   BC Loss: tensor(2.8962e-06)   NS PDE Loss: tensor(95.8718)   NS Div Free
Loss: tensor(5.7790e-32)   Mv Bdry Jump_loss: tensor(1.4218e-17) SurfaceTension_loss: tensor(355.36
20)
Iteration: 31200   Total Loss: tensor(14166.9111)
IC Loss: tensor(1.6795e-05)   BC Loss: tensor(1.2914e-06)   NS PDE Loss: tensor(95.8688)   NS Div Free
Loss: tensor(7.7172e-30)   Mv Bdry Jump_loss: tensor(1.6522e-16) SurfaceTension_loss: tensor(247.83
18)
Iteration: 31400   Total Loss: tensor(12369.8135)
IC Loss: tensor(1.5806e-05)   BC Loss: tensor(1.1009e-08)   NS PDE Loss: tensor(95.8854)   NS Div Free
Loss: tensor(9.6497e-33)   Mv Bdry Jump_loss: tensor(1.7271e-18) SurfaceTension_loss: tensor(213.86
64)
Iteration: 31600   Total Loss: tensor(12953.3467)
IC Loss: tensor(1.6574e-05)   BC Loss: tensor(2.8053e-12)   NS PDE Loss: tensor(95.8725)   NS Div Free
Loss: tensor(1.2762e-32)   Mv Bdry Jump_loss: tensor(1.9462e-18) SurfaceTension_loss: tensor(224.00
23)
Iteration: 31800   Total Loss: tensor(12552.6895)
IC Loss: tensor(1.4935e-05)   BC Loss: tensor(1.3257e-13)   NS PDE Loss: tensor(95.8993)   NS Div Free
Loss: tensor(5.7321e-33)   Mv Bdry Jump_loss: tensor(1.2976e-18) SurfaceTension_loss: tensor(219.26
64)
Iteration: 32000   Total Loss: tensor(10408.5537)
IC Loss: tensor(1.1417e-05)   BC Loss: tensor(8.1849e-13)   NS PDE Loss: tensor(95.8838)   NS Div Free
Loss: tensor(2.0916e-32)   Mv Bdry Jump_loss: tensor(1.8920e-18) SurfaceTension_loss: tensor(183.41
88)
Iteration: 32200   Total Loss: tensor(8173.3320)
IC Loss: tensor(9.9959e-06)   BC Loss: tensor(3.8300e-11)   NS PDE Loss: tensor(95.9146)   NS Div Free
Loss: tensor(9.8998e-33)   Mv Bdry Jump_loss: tensor(1.0406e-18) SurfaceTension_loss: tensor(141.55
66)
Iteration: 32400   Total Loss: tensor(8584.9365)
IC Loss: tensor(1.0502e-05)   BC Loss: tensor(4.4862e-08)   NS PDE Loss: tensor(95.9237)   NS Div Free
Loss: tensor(1.0840e-32)   Mv Bdry Jump_loss: tensor(4.3163e-19) SurfaceTension_loss: tensor(148.77

70)
Iteration: 32600   Total Loss: tensor(6208.4614)
IC Loss: tensor(6.5604e-06)   BC Loss: tensor(2.9640e-06)   NS PDE Loss: tensor(95.9337)   NS Div Free
Loss: tensor(8.2292e-34)   Mv Bdry Jump_loss: tensor(1.0552e-17) SurfaceTension_loss: tensor(109.12
98)
Iteration: 32800   Total Loss: tensor(5177.8442)
IC Loss: tensor(4.0744e-06)   BC Loss: tensor(1.7757e-07)   NS PDE Loss: tensor(95.9346)   NS Div Free
Loss: tensor(9.7489e-33)   Mv Bdry Jump_loss: tensor(2.6657e-17) SurfaceTension_loss: tensor(93.489
4)
Iteration: 33000   Total Loss: tensor(4175.9805)
IC Loss: tensor(2.5058e-06)   BC Loss: tensor(6.2979e-07)   NS PDE Loss: tensor(95.9402)   NS Div Free
Loss: tensor(2.3991e-35)   Mv Bdry Jump_loss: tensor(6.8108e-20) SurfaceTension_loss: tensor(76.589
2)
Iteration: 33200   Total Loss: tensor(5687.0063)
IC Loss: tensor(1.4706e-05)   BC Loss: tensor(5.0821e-05)   NS PDE Loss: tensor(95.9404)   NS Div Free
Loss: tensor(3.9188e-34)   Mv Bdry Jump_loss: tensor(5.3347e-21) SurfaceTension_loss: tensor(82.408
9)
Iteration: 33400   Total Loss: tensor(3388.4473)
IC Loss: tensor(2.0448e-06)   BC Loss: tensor(1.4375e-07)   NS PDE Loss: tensor(95.9465)   NS Div Free
Loss: tensor(4.0029e-36)   Mv Bdry Jump_loss: tensor(3.8485e-21) SurfaceTension_loss: tensor(61.760
5)
Iteration: 33600   Total Loss: tensor(6955.0088)
IC Loss: tensor(2.9865e-06)   BC Loss: tensor(1.8587e-08)   NS PDE Loss: tensor(95.9491)   NS Div Free
Loss: tensor(1.4186e-37)   Mv Bdry Jump_loss: tensor(1.3823e-22) SurfaceTension_loss: tensor(131.20
83)
Iteration: 33800   Total Loss: tensor(2911.2402)
IC Loss: tensor(2.1176e-06)   BC Loss: tensor(1.6601e-06)   NS PDE Loss: tensor(95.9519)   NS Div Free
Loss: tensor(3.5715e-33)   Mv Bdry Jump_loss: tensor(7.6336e-19) SurfaceTension_loss: tensor(52.070
6)
Iteration: 34000   Total Loss: tensor(2359.4812)
IC Loss: tensor(1.8299e-06)   BC Loss: tensor(7.9395e-07)   NS PDE Loss: tensor(95.9574)   NS Div Free
Loss: tensor(8.7066e-36)   Mv Bdry Jump_loss: tensor(6.7249e-22) SurfaceTension_loss: tensor(41.610
7)
Iteration: 34200   Total Loss: tensor(2353.0381)
IC Loss: tensor(2.3710e-06)   BC Loss: tensor(5.3723e-06)   NS PDE Loss: tensor(95.9480)   NS Div Free
Loss: tensor(8.0148e-38)   Mv Bdry Jump_loss: tensor(1.1113e-22) SurfaceTension_loss: tensor(40.399
7)
Iteration: 34400   Total Loss: tensor(1691.5605)
IC Loss: tensor(6.5085e-07)   BC Loss: tensor(4.8423e-09)   NS PDE Loss: tensor(95.9536)   NS Div Free
Loss: tensor(2.9937e-35)   Mv Bdry Jump_loss: tensor(1.2395e-19) SurfaceTension_loss: tensor(30.610
4)
Iteration: 34600   Total Loss: tensor(2819.7410)

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IC Loss:  tensor(1.7250e-06)    BC Loss:  tensor(1.3173e-06)    NS PDE Loss:  tensor(95.9447)   NS Div Free
Loss:  tensor(1.5605e-35)      Mv Bdry Jump_loss:  tensor(3.4258e-20)  SurfaceTension_loss:  tensor(51.025
9)
Iteration: 34800      Total Loss: tensor(3158.6829)
IC Loss:  tensor(1.9842e-06)    BC Loss:  tensor(1.2363e-06)    NS PDE Loss:  tensor(95.9604)   NS Div Free
Loss:  tensor(1.1978e-33)      Mv Bdry Jump_loss:  tensor(5.0551e-18)  SurfaceTension_loss:  tensor(57.286
0)
Iteration: 35000      Total Loss: tensor(3004.5007)
IC Loss:  tensor(2.7937e-06)    BC Loss:  tensor(4.6365e-06)    NS PDE Loss:  tensor(95.9676)   NS Div Free
Loss:  tensor(2.5940e-33)      Mv Bdry Jump_loss:  tensor(6.7633e-18)  SurfaceTension_loss:  tensor(52.583
2)
Iteration: 35200      Total Loss: tensor(1804.3558)
IC Loss:  tensor(5.8549e-07)    BC Loss:  tensor(1.5888e-07)    NS PDE Loss:  tensor(95.9663)   NS Div Free
Loss:  tensor(2.6266e-32)      Mv Bdry Jump_loss:  tensor(2.1509e-17)  SurfaceTension_loss:  tensor(32.996
8)
Iteration: 35400      Total Loss: tensor(1949.0150)
IC Loss:  tensor(8.2920e-07)    BC Loss:  tensor(6.3610e-07)    NS PDE Loss:  tensor(95.9661)   NS Div Free
Loss:  tensor(9.8789e-34)      Mv Bdry Jump_loss:  tensor(2.1225e-18)  SurfaceTension_loss:  tensor(35.402
6)
Iteration: 35600      Total Loss: tensor(1481.5657)
IC Loss:  tensor(3.3136e-07)    BC Loss:  tensor(2.8766e-08)    NS PDE Loss:  tensor(95.9720)   NS Div Free
Loss:  tensor(9.6616e-34)      Mv Bdry Jump_loss:  tensor(6.7526e-19)  SurfaceTension_loss:  tensor(27.049
1)
Iteration: 35800      Total Loss: tensor(1451.4917)
IC Loss:  tensor(3.4865e-07)    BC Loss:  tensor(3.9536e-07)    NS PDE Loss:  tensor(95.9722)   NS Div Free
Loss:  tensor(4.7714e-34)      Mv Bdry Jump_loss:  tensor(7.0906e-19)  SurfaceTension_loss:  tensor(26.413
1)
Iteration: 36000      Total Loss: tensor(1871.4910)
IC Loss:  tensor(1.4615e-06)    BC Loss:  tensor(3.8975e-06)    NS PDE Loss:  tensor(95.9731)   NS Div Free
Loss:  tensor(1.1153e-34)      Mv Bdry Jump_loss:  tensor(3.1060e-20)  SurfaceTension_loss:  tensor(32.587
3)
Iteration: 36200      Total Loss: tensor(2213.2588)
IC Loss:  tensor(2.9345e-07)    BC Loss:  tensor(6.4239e-08)    NS PDE Loss:  tensor(95.9690)   NS Div Free
Loss:  tensor(1.5468e-37)      Mv Bdry Jump_loss:  tensor(7.0793e-22)  SurfaceTension_loss:  tensor(41.758
9)
Iteration: 36400      Total Loss: tensor(1319.7469)
IC Loss:  tensor(9.6067e-07)    BC Loss:  tensor(2.7377e-06)    NS PDE Loss:  tensor(95.9790)   NS Div Free
Loss:  tensor(1.8867e-37)      Mv Bdry Jump_loss:  tensor(2.2097e-22)  SurfaceTension_loss:  tensor(22.554
0)
Iteration: 36600      Total Loss: tensor(2627.5012)
IC Loss:  tensor(2.6710e-06)    BC Loss:  tensor(1.4087e-08)    NS PDE Loss:  tensor(95.9726)   NS Div Free
Loss:  tensor(9.2375e-35)      Mv Bdry Jump_loss:  tensor(1.3496e-20)  SurfaceTension_loss:  tensor(45.288
```

6)
Iteration: 36800   Total Loss: tensor(1717.0359)
IC Loss: tensor(1.7236e-06)   BC Loss: tensor(3.8349e-06)   NS PDE Loss: tensor(95.9785)   NS Div Free
Loss: tensor(1.0439e-31)   Mv Bdry Jump_loss: tensor(2.7418e-17) SurfaceTension_loss: tensor(28.974
0)
Iteration: 37000   Total Loss: tensor(1822.8262)
IC Loss: tensor(1.2282e-06)   BC Loss: tensor(2.9848e-06)   NS PDE Loss: tensor(95.9794)   NS Div Free
Loss: tensor(1.1953e-36)   Mv Bdry Jump_loss: tensor(4.6471e-23) SurfaceTension_loss: tensor(32.080
6)
Iteration: 37200   Total Loss: tensor(896.0797)
IC Loss: tensor(9.7635e-07)   BC Loss: tensor(1.8464e-06)   NS PDE Loss: tensor(95.9892)   NS Div Free
Loss: tensor(7.2576e-36)   Mv Bdry Jump_loss: tensor(5.8805e-23) SurfaceTension_loss: tensor(14.049
1)
Iteration: 37400   Total Loss: tensor(867.0871)
IC Loss: tensor(2.8475e-07)   BC Loss: tensor(2.4158e-07)   NS PDE Loss: tensor(95.9930)   NS Div Free
Loss: tensor(3.2143e-39)   Mv Bdry Jump_loss: tensor(3.7636e-24) SurfaceTension_loss: tensor(14.852
4)
Iteration: 37600   Total Loss: tensor(2183.1294)
IC Loss: tensor(1.3765e-06)   BC Loss: tensor(2.0198e-07)   NS PDE Loss: tensor(95.9721)   NS Div Free
Loss: tensor(1.1229e-37)   Mv Bdry Jump_loss: tensor(1.3467e-23) SurfaceTension_loss: tensor(38.990
1)
Iteration: 37800   Total Loss: tensor(1102.7769)
IC Loss: tensor(2.7248e-07)   BC Loss: tensor(1.9437e-08)   NS PDE Loss: tensor(95.9921)   NS Div Free
Loss: tensor(3.8789e-41)   Mv Bdry Jump_loss: tensor(2.0434e-26) SurfaceTension_loss: tensor(19.590
7)
Iteration: 38000   Total Loss: tensor(1017.1319)
IC Loss: tensor(2.9213e-07)   BC Loss: tensor(3.0746e-08)   NS PDE Loss: tensor(95.9878)   NS Div Free
Loss: tensor(1.0447e-33)   Mv Bdry Jump_loss: tensor(9.7927e-19) SurfaceTension_loss: tensor(17.838
6)
Iteration: 38200   Total Loss: tensor(1315.0835)
IC Loss: tensor(1.6210e-07)   BC Loss: tensor(1.3515e-09)   NS PDE Loss: tensor(95.9927)   NS Div Free
Loss: tensor(1.5902e-37)   Mv Bdry Jump_loss: tensor(2.1750e-24) SurfaceTension_loss: tensor(24.057
6)
Iteration: 38400   Total Loss: tensor(1012.0710)
IC Loss: tensor(2.3886e-07)   BC Loss: tensor(2.0452e-08)   NS PDE Loss: tensor(95.9918)   NS Div Free
Loss: tensor(6.7047e-39)   Mv Bdry Jump_loss: tensor(1.5538e-24) SurfaceTension_loss: tensor(17.843
9)
Iteration: 38600   Total Loss: tensor(860.9077)
IC Loss: tensor(3.3484e-07)   BC Loss: tensor(1.4337e-07)   NS PDE Loss: tensor(95.9879)   NS Div Free
Loss: tensor(5.4535e-34)   Mv Bdry Jump_loss: tensor(5.9195e-20) SurfaceTension_loss: tensor(14.628
7)
Iteration: 38800   Total Loss: tensor(1655.0917)

IC Loss: tensor(2.4198e-07)   BC Loss: tensor(2.6576e-07)   NS PDE Loss: tensor(95.9848)   NS Div Free Loss: tensor(1.0438e-37)   Mv Bdry Jump_loss: tensor(2.8484e-24) SurfaceTension_loss: tensor(30.6982)
Iteration: 39000   Total Loss: tensor(832.8983)
IC Loss: tensor(1.1430e-06)   BC Loss: tensor(4.2504e-06)   NS PDE Loss: tensor(95.9893)   NS Div Free Loss: tensor(3.6892e-39)   Mv Bdry Jump_loss: tensor(1.3532e-25) SurfaceTension_loss: tensor(12.4521)
Iteration: 39200   Total Loss: tensor(691.8382)
IC Loss: tensor(1.8710e-07)   BC Loss: tensor(2.1202e-07)   NS PDE Loss: tensor(95.9868)   NS Div Free Loss: tensor(2.9953e-35)   Mv Bdry Jump_loss: tensor(1.5411e-20) SurfaceTension_loss: tensor(11.5428)
Iteration: 39400   Total Loss: tensor(838.2382)
IC Loss: tensor(1.6941e-07)   BC Loss: tensor(4.9755e-12)   NS PDE Loss: tensor(95.9883)   NS Div Free Loss: tensor(9.7440e-38)   Mv Bdry Jump_loss: tensor(3.8548e-23) SurfaceTension_loss: tensor(14.5062)
Iteration: 39600   Total Loss: tensor(673.0906)
IC Loss: tensor(9.6279e-07)   BC Loss: tensor(2.2989e-06)   NS PDE Loss: tensor(95.9941)   NS Div Free Loss: tensor(1.1053e-33)   Mv Bdry Jump_loss: tensor(1.8414e-20) SurfaceTension_loss: tensor(9.6164)
Iteration: 39800   Total Loss: tensor(3848.9238)
IC Loss: tensor(2.5196e-07)   BC Loss: tensor(4.0601e-07)   NS PDE Loss: tensor(95.9284)   NS Div Free Loss: tensor(5.2247e-35)   Mv Bdry Jump_loss: tensor(2.0985e-22) SurfaceTension_loss: tensor(74.5560)
Iteration: 40000   Total Loss: tensor(734.2868)
IC Loss: tensor(1.5708e-07)   BC Loss: tensor(2.8555e-08)   NS PDE Loss: tensor(95.9892)   NS Div Free Loss: tensor(1.0458e-38)   Mv Bdry Jump_loss: tensor(5.6018e-24) SurfaceTension_loss: tensor(12.4518)
Iteration: 40200   Total Loss: tensor(843.0485)
IC Loss: tensor(6.3301e-07)   BC Loss: tensor(1.0185e-06)   NS PDE Loss: tensor(95.9882)   NS Div Free Loss: tensor(4.8652e-40)   Mv Bdry Jump_loss: tensor(8.5317e-26) SurfaceTension_loss: tensor(13.6752)
Iteration: 40400   Total Loss: tensor(653.5012)
IC Loss: tensor(7.6833e-07)   BC Loss: tensor(2.1604e-06)   NS PDE Loss: tensor(95.9959)   NS Div Free Loss: tensor(8.5759e-39)   Mv Bdry Jump_loss: tensor(1.5289e-24) SurfaceTension_loss: tensor(9.6135)
Iteration: 40600   Total Loss: tensor(939.2190)
IC Loss: tensor(6.1733e-08)   BC Loss: tensor(2.2328e-09)   NS PDE Loss: tensor(95.9909)   NS Div Free Loss: tensor(1.8540e-35)   Mv Bdry Jump_loss: tensor(7.5992e-21) SurfaceTension_loss: tensor(16.7411)
Iteration: 40800   Total Loss: tensor(668.3980)
IC Loss: tensor(7.8380e-08)   BC Loss: tensor(4.7768e-08)   NS PDE Loss: tensor(95.9908)   NS Div Free Loss: tensor(1.0922e-32)   Mv Bdry Jump_loss: tensor(4.1634e-19) SurfaceTension_loss: tensor(11.291

4)
Iteration: 41000   Total Loss: tensor(2312.0952)
IC Loss: tensor(7.7199e-07)   BC Loss: tensor(1.2009e-06)   NS PDE Loss: tensor(95.9522)   NS Div Free
Loss: tensor(9.6215e-38)   Mv Bdry Jump_loss: tensor(3.2526e-23) SurfaceTension_loss: tensor(42.778
9)
Iteration: 41200   Total Loss: tensor(1044.7800)
IC Loss: tensor(3.1119e-06)   BC Loss: tensor(5.9344e-06)   NS PDE Loss: tensor(95.9954)   NS Div Free
Loss: tensor(5.1223e-39)   Mv Bdry Jump_loss: tensor(3.2438e-24) SurfaceTension_loss: tensor(12.751
9)
Iteration: 41400   Total Loss: tensor(960.5295)
IC Loss: tensor(1.9591e-07)   BC Loss: tensor(1.9565e-08)   NS PDE Loss: tensor(95.9963)   NS Div Free
Loss: tensor(4.1954e-38)   Mv Bdry Jump_loss: tensor(3.7841e-23) SurfaceTension_loss: tensor(16.898
8)
Iteration: 41600   Total Loss: tensor(593.3979)
IC Loss: tensor(1.8335e-07)   BC Loss: tensor(5.2296e-08)   NS PDE Loss: tensor(95.9951)   NS Div Free
Loss: tensor(3.7382e-38)   Mv Bdry Jump_loss: tensor(5.4562e-24) SurfaceTension_loss: tensor(9.581
4)
Iteration: 41800   Total Loss: tensor(5051.0049)
IC Loss: tensor(4.1053e-07)   BC Loss: tensor(4.9932e-08)   NS PDE Loss: tensor(95.9277)   NS Div Free
Loss: tensor(1.0064e-35)   Mv Bdry Jump_loss: tensor(3.1002e-21) SurfaceTension_loss: tensor(98.280
5)
Iteration: 42000   Total Loss: tensor(903.8788)
IC Loss: tensor(5.4225e-07)   BC Loss: tensor(1.2046e-06)   NS PDE Loss: tensor(95.9922)   NS Div Free
Loss: tensor(4.7812e-34)   Mv Bdry Jump_loss: tensor(4.8219e-20) SurfaceTension_loss: tensor(15.073
2)
Iteration: 42200   Total Loss: tensor(743.8754)
IC Loss: tensor(1.0892e-07)   BC Loss: tensor(8.8323e-08)   NS PDE Loss: tensor(95.9950)   NS Div Free
Loss: tensor(1.1161e-35)   Mv Bdry Jump_loss: tensor(3.3378e-21) SurfaceTension_loss: tensor(12.739
8)
Iteration: 42400   Total Loss: tensor(1009.1876)
IC Loss: tensor(9.0839e-07)   BC Loss: tensor(1.6350e-06)   NS PDE Loss: tensor(95.9936)   NS Div Free
Loss: tensor(1.4511e-36)   Mv Bdry Jump_loss: tensor(1.7925e-21) SurfaceTension_loss: tensor(16.447
1)
Iteration: 42600   Total Loss: tensor(540.3242)
IC Loss: tensor(1.8112e-07)   BC Loss: tensor(4.9179e-07)   NS PDE Loss: tensor(96.0002)   NS Div Free
Loss: tensor(1.2388e-39)   Mv Bdry Jump_loss: tensor(1.7441e-25) SurfaceTension_loss: tensor(8.524
2)
Iteration: 42800   Total Loss: tensor(787.4489)
IC Loss: tensor(6.1020e-08)   BC Loss: tensor(3.1052e-08)   NS PDE Loss: tensor(95.9981)   NS Div Free
Loss: tensor(2.8724e-39)   Mv Bdry Jump_loss: tensor(1.0478e-25) SurfaceTension_loss: tensor(13.707
0)
Iteration: 43000   Total Loss: tensor(518.9124)

IC Loss: tensor(6.6212e-08)   BC Loss: tensor(3.1454e-08)   NS PDE Loss: tensor(95.9991)   NS Div Free
Loss: tensor(3.0565e-38)   Mv Bdry Jump_loss: tensor(8.7266e-22) SurfaceTension_loss: tensor(8.325
8)
Iteration: 43200   Total Loss: tensor(856.8514)
IC Loss: tensor(2.2264e-06)   BC Loss: tensor(8.6507e-06)   NS PDE Loss: tensor(96.0038)   NS Div Free
Loss: tensor(2.0241e-37)   Mv Bdry Jump_loss: tensor(7.6659e-22) SurfaceTension_loss: tensor(10.764
1)
Iteration: 43400   Total Loss: tensor(558.1188)
IC Loss: tensor(1.3370e-07)   BC Loss: tensor(2.1534e-07)   NS PDE Loss: tensor(96.0052)   NS Div Free
Loss: tensor(3.4270e-37)   Mv Bdry Jump_loss: tensor(1.3626e-21) SurfaceTension_loss: tensor(8.974
9)
Iteration: 43600   Total Loss: tensor(550.3754)
IC Loss: tensor(2.8319e-08)   BC Loss: tensor(1.7860e-11)   NS PDE Loss: tensor(96.0030)   NS Div Free
Loss: tensor(5.2704e-37)   Mv Bdry Jump_loss: tensor(4.4637e-22) SurfaceTension_loss: tensor(9.030
8)
Iteration: 43800   Total Loss: tensor(1286.3950)
IC Loss: tensor(6.9000e-06)   BC Loss: tensor(1.2906e-05)   NS PDE Loss: tensor(96.0026)   NS Div Free
Loss: tensor(6.6682e-37)   Mv Bdry Jump_loss: tensor(2.8957e-23) SurfaceTension_loss: tensor(10.007
8)
Iteration: 44000   Total Loss: tensor(830.6835)
IC Loss: tensor(1.8816e-06)   BC Loss: tensor(3.6094e-06)   NS PDE Loss: tensor(95.9933)   NS Div Free
Loss: tensor(4.3610e-35)   Mv Bdry Jump_loss: tensor(2.1590e-20) SurfaceTension_loss: tensor(10.930
6)
Iteration: 44200   Total Loss: tensor(477.8069)
IC Loss: tensor(5.5833e-08)   BC Loss: tensor(9.7913e-12)   NS PDE Loss: tensor(95.9988)   NS Div Free
Loss: tensor(1.8473e-38)   Mv Bdry Jump_loss: tensor(8.8586e-25) SurfaceTension_loss: tensor(7.524
5)
Iteration: 44400   Total Loss: tensor(621.4597)
IC Loss: tensor(1.8593e-07)   BC Loss: tensor(5.4643e-07)   NS PDE Loss: tensor(95.9954)   NS Div Free
Loss: tensor(1.7693e-35)   Mv Bdry Jump_loss: tensor(3.1919e-21) SurfaceTension_loss: tensor(10.137
4)
Iteration: 44600   Total Loss: tensor(534.1723)
IC Loss: tensor(5.9238e-08)   BC Loss: tensor(1.6457e-10)   NS PDE Loss: tensor(95.9967)   NS Div Free
Loss: tensor(4.3269e-38)   Mv Bdry Jump_loss: tensor(1.1558e-24) SurfaceTension_loss: tensor(8.645
0)
Iteration: 44800   Total Loss: tensor(1327.0834)
IC Loss: tensor(8.7087e-06)   BC Loss: tensor(3.3041e-05)   NS PDE Loss: tensor(96.0031)   NS Div Free
Loss: tensor(4.1395e-36)   Mv Bdry Jump_loss: tensor(3.1455e-21) SurfaceTension_loss: tensor(7.204
2)
Iteration: 45000   Total Loss: tensor(903.7811)
IC Loss: tensor(6.3705e-08)   BC Loss: tensor(1.2741e-11)   NS PDE Loss: tensor(95.9884)   NS Div Free
Loss: tensor(1.0669e-35)   Mv Bdry Jump_loss: tensor(4.5451e-21) SurfaceTension_loss: tensor(16.028

4)
Iteration: 45200   Total Loss: tensor(593.3022)
IC Loss: tensor(3.8126e-08)   BC Loss: tensor(6.6241e-11)   NS PDE Loss: tensor(95.9924)   NS Div Free
Loss: tensor(4.9683e-35)   Mv Bdry Jump_loss: tensor(3.6309e-21) SurfaceTension_loss: tensor(9.869
9)
Iteration: 45400   Total Loss: tensor(635.4369)
IC Loss: tensor(1.7143e-06)   BC Loss: tensor(3.3660e-06)   NS PDE Loss: tensor(96.0011)   NS Div Free
Loss: tensor(3.3636e-36)   Mv Bdry Jump_loss: tensor(2.7666e-21) SurfaceTension_loss: tensor(7.360
0)
Iteration: 45600   Total Loss: tensor(454.7769)
IC Loss: tensor(5.7975e-08)   BC Loss: tensor(5.1199e-08)   NS PDE Loss: tensor(96.0014)   NS Div Free
Loss: tensor(2.0726e-36)   Mv Bdry Jump_loss: tensor(3.4933e-22) SurfaceTension_loss: tensor(7.059
6)
Iteration: 45800   Total Loss: tensor(2483.3640)
IC Loss: tensor(5.3460e-07)   BC Loss: tensor(1.8205e-07)   NS PDE Loss: tensor(95.9605)   NS Div Free
Loss: tensor(2.2018e-37)   Mv Bdry Jump_loss: tensor(5.6679e-23) SurfaceTension_loss: tensor(46.678
9)
Iteration: 46000   Total Loss: tensor(527.3295)
IC Loss: tensor(6.1197e-07)   BC Loss: tensor(2.3867e-06)   NS PDE Loss: tensor(96.0044)   NS Div Free
Loss: tensor(5.9597e-42)   Mv Bdry Jump_loss: tensor(6.1638e-27) SurfaceTension_loss: tensor(7.402
6)
Iteration: 46200   Total Loss: tensor(483.7307)
IC Loss: tensor(1.6387e-08)   BC Loss: tensor(1.2800e-09)   NS PDE Loss: tensor(96.0024)   NS Div Free
Loss: tensor(2.6781e-36)   Mv Bdry Jump_loss: tensor(9.3285e-23) SurfaceTension_loss: tensor(7.721
8)
Iteration: 46400   Total Loss: tensor(476.0422)
IC Loss: tensor(1.0244e-08)   BC Loss: tensor(5.8178e-12)   NS PDE Loss: tensor(96.0041)   NS Div Free
Loss: tensor(2.9729e-37)   Mv Bdry Jump_loss: tensor(4.9383e-24) SurfaceTension_loss: tensor(7.580
3)
Iteration: 46600   Total Loss: tensor(398.5618)
IC Loss: tensor(2.3682e-07)   BC Loss: tensor(9.2111e-07)   NS PDE Loss: tensor(96.0010)   NS Div Free
Loss: tensor(1.4030e-38)   Mv Bdry Jump_loss: tensor(4.7453e-24) SurfaceTension_loss: tensor(5.577
6)
Iteration: 46800   Total Loss: tensor(1034.9928)
IC Loss: tensor(1.4320e-07)   BC Loss: tensor(2.5175e-09)   NS PDE Loss: tensor(95.9877)   NS Div Free
Loss: tensor(2.0518e-36)   Mv Bdry Jump_loss: tensor(9.4380e-24) SurfaceTension_loss: tensor(18.493
7)
Iteration: 47000   Total Loss: tensor(832.8959)
IC Loss: tensor(4.4074e-06)   BC Loss: tensor(1.7099e-05)   NS PDE Loss: tensor(96.0026)   NS Div Free
Loss: tensor(6.9935e-38)   Mv Bdry Jump_loss: tensor(1.9790e-22) SurfaceTension_loss: tensor(5.923
0)
Iteration: 47200   Total Loss: tensor(566.2098)

IC Loss: tensor(1.0494e-07)   BC Loss: tensor(5.3902e-08)   NS PDE Loss: tensor(95.9998)   NS Div Free
Loss: tensor(3.2418e-35)   Mv Bdry Jump_loss: tensor(9.0049e-19) SurfaceTension_loss: tensor(9.194
3)
Iteration: 47400   Total Loss: tensor(10439242.)
IC Loss: tensor(0.1044)   BC Loss: tensor(7.0713e-09)   NS PDE Loss: tensor(95.9863)   NS Div Free
Loss: tensor(2.2772e-33)   Mv Bdry Jump_loss: tensor(5.0490e-19) SurfaceTension_loss: tensor(14.556
5)
Iteration: 47600   Total Loss: tensor(573.9126)
IC Loss: tensor(1.7495e-07)   BC Loss: tensor(1.4690e-07)   NS PDE Loss: tensor(96.0039)   NS Div Free
Loss: tensor(8.9847e-34)   Mv Bdry Jump_loss: tensor(4.8810e-19) SurfaceTension_loss: tensor(9.208
3)
Iteration: 47800   Total Loss: tensor(536.2050)
IC Loss: tensor(8.2764e-08)   BC Loss: tensor(6.6051e-09)   NS PDE Loss: tensor(96.0024)   NS Div Free
Loss: tensor(7.6704e-34)   Mv Bdry Jump_loss: tensor(4.0488e-19) SurfaceTension_loss: tensor(8.638
5)
Iteration: 48000   Total Loss: tensor(505.9503)
IC Loss: tensor(9.2067e-08)   BC Loss: tensor(8.1129e-09)   NS PDE Loss: tensor(96.0051)   NS Div Free
Loss: tensor(2.1609e-36)   Mv Bdry Jump_loss: tensor(1.2960e-18) SurfaceTension_loss: tensor(8.014
8)
Iteration: 48200   Total Loss: tensor(509.2173)
IC Loss: tensor(8.7905e-07)   BC Loss: tensor(1.6643e-06)   NS PDE Loss: tensor(96.0076)   NS Div Free
Loss: tensor(7.9727e-35)   Mv Bdry Jump_loss: tensor(6.5374e-19) SurfaceTension_loss: tensor(6.506
1)
Iteration: 48400   Total Loss: tensor(435.4744)
IC Loss: tensor(3.0232e-07)   BC Loss: tensor(4.9356e-07)   NS PDE Loss: tensor(96.0084)   NS Div Free
Loss: tensor(2.4868e-35)   Mv Bdry Jump_loss: tensor(4.0940e-19) SurfaceTension_loss: tensor(6.184
7)
Iteration: 48600   Total Loss: tensor(704.6370)
IC Loss: tensor(9.9583e-07)   BC Loss: tensor(3.5298e-06)   NS PDE Loss: tensor(96.0048)   NS Div Free
Loss: tensor(4.2642e-35)   Mv Bdry Jump_loss: tensor(1.0173e-19) SurfaceTension_loss: tensor(10.181
0)
Iteration: 48800   Total Loss: tensor(534.0972)
IC Loss: tensor(1.3470e-07)   BC Loss: tensor(2.4096e-07)   NS PDE Loss: tensor(96.0038)   NS Div Free
Loss: tensor(5.2634e-36)   Mv Bdry Jump_loss: tensor(4.7809e-21) SurfaceTension_loss: tensor(8.492
5)
Iteration: 49000   Total Loss: tensor(451.7748)
IC Loss: tensor(1.6022e-07)   BC Loss: tensor(2.2335e-07)   NS PDE Loss: tensor(96.0066)   NS Div Free
Loss: tensor(2.9152e-36)   Mv Bdry Jump_loss: tensor(4.6179e-21) SurfaceTension_loss: tensor(6.794
9)
Iteration: 49200   Total Loss: tensor(473.0600)
IC Loss: tensor(9.3373e-08)   BC Loss: tensor(1.8155e-08)   NS PDE Loss: tensor(96.0053)   NS Div Free
Loss: tensor(4.3881e-37)   Mv Bdry Jump_loss: tensor(1.1566e-21) SurfaceTension_loss: tensor(7.354

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3)
Iteration: 49400      Total Loss: tensor(404.3713)
IC Loss:  tensor(5.8755e-08)    BC Loss:  tensor(2.3766e-08)    NS PDE Loss:  tensor(96.0080)   NS Div Free
Loss:  tensor(2.5205e-35)       Mv Bdry Jump_loss:  tensor(2.1438e-22)  SurfaceTension_loss:  tensor(6.049
8)
Iteration: 49600      Total Loss: tensor(441.0772)
IC Loss:  tensor(7.9019e-07)    BC Loss:  tensor(1.4792e-06)    NS PDE Loss:  tensor(96.0090)   NS Div Free
Loss:  tensor(2.9702e-35)       Mv Bdry Jump_loss:  tensor(2.5921e-21)  SurfaceTension_loss:  tensor(5.321
0)
Iteration: 49800      Total Loss: tensor(466.3493)
IC Loss:  tensor(7.3558e-07)    BC Loss:  tensor(1.0723e-06)    NS PDE Loss:  tensor(96.0098)   NS Div Free
Loss:  tensor(3.8273e-39)       Mv Bdry Jump_loss:  tensor(7.0754e-25)  SurfaceTension_loss:  tensor(5.935
6)
Iteration: 50000      Total Loss: tensor(408.0334)
IC Loss:  tensor(8.4502e-08)    BC Loss:  tensor(3.5343e-08)    NS PDE Loss:  tensor(96.0078)   NS Div Free
Loss:  tensor(1.4046e-39)       Mv Bdry Jump_loss:  tensor(2.9714e-25)  SurfaceTension_loss:  tensor(6.071
5)
Current Final Time: 0.2 Current Learning Rate:  0.005
Iteration: 200  Total Loss: tensor(1.5776e+09)
IC Loss:  tensor(10.0682)       BC Loss:  tensor(1.2621e-05)    NS PDE Loss:  tensor(92.0077)   NS Div Free
Loss:  tensor(1.8150e-34)       Mv Bdry Jump_loss:  tensor(1.7686e-20)  SurfaceTension_loss:  tensor(114147
26.)
Iteration: 400  Total Loss: tensor(2.1324e+09)
IC Loss:  tensor(14.3872)       BC Loss:  tensor(1.2426e-05)    NS PDE Loss:  tensor(93.0238)   NS Div Free
Loss:  tensor(4.7575e-34)       Mv Bdry Jump_loss:  tensor(5.1058e-20)  SurfaceTension_loss:  tensor(138744
40.)
Iteration: 600  Total Loss: tensor(1729.1514)
IC Loss:  tensor(2.0785e-06)    BC Loss:  tensor(3.1049e-09)    NS PDE Loss:  tensor(95.9884)   NS Div Free
Loss:  tensor(7.1400e-39)       Mv Bdry Jump_loss:  tensor(2.4191e-25)  SurfaceTension_loss:  tensor(28.506
3)
Iteration: 800  Total Loss: tensor(1164.0728)
IC Loss:  tensor(1.0604e-06)    BC Loss:  tensor(3.3527e-08)    NS PDE Loss:  tensor(95.9878)   NS Div Free
Loss:  tensor(2.4375e-40)       Mv Bdry Jump_loss:  tensor(3.2302e-25)  SurfaceTension_loss:  tensor(19.240
9)
Iteration: 1000       Total Loss: tensor(1351.4722)
IC Loss:  tensor(3.5217e-06)    BC Loss:  tensor(1.1837e-05)    NS PDE Loss:  tensor(95.9858)   NS Div Free
Loss:  tensor(6.0841e-39)       Mv Bdry Jump_loss:  tensor(2.3903e-23)  SurfaceTension_loss:  tensor(18.066
3)
Iteration: 1200       Total Loss: tensor(1281.7048)
IC Loss:  tensor(5.5942e-06)    BC Loss:  tensor(5.6327e-06)    NS PDE Loss:  tensor(95.9924)   NS Div Free
Loss:  tensor(1.7242e-39)       Mv Bdry Jump_loss:  tensor(6.7454e-26)  SurfaceTension_loss:  tensor(12.525
8)
```

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Iteration: 1400        Total Loss: tensor(806.6943)
IC Loss:  tensor(4.8631e-07)   BC Loss:  tensor(9.0100e-07)   NS PDE Loss:  tensor(96.0000)   NS Div Free
Loss:  tensor(6.8299e-42)      Mv Bdry Jump_loss:  tensor(1.6639e-27)  SurfaceTension_loss:  tensor(13.241
3)
Iteration: 1600        Total Loss: tensor(739.1570)
IC Loss:  tensor(5.4543e-07)   BC Loss:  tensor(2.8892e-07)   NS PDE Loss:  tensor(95.9900)   NS Div Free
Loss:  tensor(3.2006e-40)      Mv Bdry Jump_loss:  tensor(9.1929e-26)  SurfaceTension_loss:  tensor(11.772
5)
Iteration: 1800        Total Loss: tensor(790.4894)
IC Loss:  tensor(1.0964e-06)   BC Loss:  tensor(3.4882e-06)   NS PDE Loss:  tensor(95.9869)   NS Div Free
Loss:  tensor(1.3490e-38)      Mv Bdry Jump_loss:  tensor(1.5690e-24)  SurfaceTension_loss:  tensor(11.697
2)
Iteration: 2000        Total Loss: tensor(1103.6815)
IC Loss:  tensor(4.6311e-07)   BC Loss:  tensor(8.6713e-07)   NS PDE Loss:  tensor(95.9771)   NS Div Free
Loss:  tensor(4.4195e-36)      Mv Bdry Jump_loss:  tensor(7.6760e-22)  SurfaceTension_loss:  tensor(19.227
9)
Iteration: 2200        Total Loss: tensor(10866.9697)
IC Loss:  tensor(9.1936e-05)   BC Loss:  tensor(2.1214e-07)   NS PDE Loss:  tensor(95.9823)   NS Div Free
Loss:  tensor(2.3416e-35)      Mv Bdry Jump_loss:  tensor(2.6510e-22)  SurfaceTension_loss:  tensor(31.547
2)
Iteration: 2400        Total Loss: tensor(764.9565)
IC Loss:  tensor(6.8696e-07)   BC Loss:  tensor(2.2191e-06)   NS PDE Loss:  tensor(95.9960)   NS Div Free
Loss:  tensor(6.7551e-37)      Mv Bdry Jump_loss:  tensor(6.0697e-23)  SurfaceTension_loss:  tensor(12.005
3)
Iteration: 2600        Total Loss: tensor(783.6490)
IC Loss:  tensor(9.3774e-07)   BC Loss:  tensor(8.7358e-07)   NS PDE Loss:  tensor(95.9844)   NS Div Free
Loss:  tensor(4.0998e-35)      Mv Bdry Jump_loss:  tensor(7.8162e-22)  SurfaceTension_loss:  tensor(11.877
8)
Iteration: 2800        Total Loss: tensor(644.5888)
IC Loss:  tensor(9.9133e-07)   BC Loss:  tensor(1.5531e-06)   NS PDE Loss:  tensor(95.9985)   NS Div Free
Loss:  tensor(4.0447e-38)      Mv Bdry Jump_loss:  tensor(1.2471e-24)  SurfaceTension_loss:  tensor(8.989
1)
Iteration: 3000        Total Loss: tensor(439.8532)
IC Loss:  tensor(6.6533e-08)   BC Loss:  tensor(6.0023e-13)   NS PDE Loss:  tensor(95.9953)   NS Div Free
Loss:  tensor(7.9133e-37)      Mv Bdry Jump_loss:  tensor(3.2408e-22)  SurfaceTension_loss:  tensor(6.744
1)
Iteration: 3200        Total Loss: tensor(850.0226)
IC Loss:  tensor(6.4337e-07)   BC Loss:  tensor(1.2178e-06)   NS PDE Loss:  tensor(95.9888)   NS Div Free
Loss:  tensor(3.2332e-38)      Mv Bdry Jump_loss:  tensor(4.9523e-24)  SurfaceTension_loss:  tensor(13.793
9)
Iteration: 3400        Total Loss: tensor(748.6649)
IC Loss:  tensor(3.7860e-07)   BC Loss:  tensor(3.0756e-07)   NS PDE Loss:  tensor(95.9788)   NS Div Free
```

Loss: tensor(1.8673e-36)   Mv Bdry Jump_loss: tensor(3.5164e-22) SurfaceTension_loss: tensor(12.296
5)
Iteration: 3600   Total Loss: tensor(402.1846)
IC Loss: tensor(2.0325e-07)   BC Loss: tensor(3.9642e-07)   NS PDE Loss: tensor(96.0006)   NS Div Free
Loss: tensor(2.0254e-37)   Mv Bdry Jump_loss: tensor(3.5099e-21) SurfaceTension_loss: tensor(5.717
2)
Iteration: 3800   Total Loss: tensor(735.2329)
IC Loss: tensor(1.7081e-07)   BC Loss: tensor(3.4752e-08)   NS PDE Loss: tensor(95.9758)   NS Div Free
Loss: tensor(2.6369e-34)   Mv Bdry Jump_loss: tensor(1.1205e-20) SurfaceTension_loss: tensor(12.443
5)
Iteration: 4000   Total Loss: tensor(1318.7084)
IC Loss: tensor(5.3766e-07)   BC Loss: tensor(9.6079e-09)   NS PDE Loss: tensor(95.9870)   NS Div Free
Loss: tensor(1.3754e-37)   Mv Bdry Jump_loss: tensor(6.9519e-24) SurfaceTension_loss: tensor(23.379
1)
Iteration: 4200   Total Loss: tensor(697.6917)
IC Loss: tensor(6.1768e-08)   BC Loss: tensor(5.0132e-09)   NS PDE Loss: tensor(95.9980)   NS Div Free
Loss: tensor(7.7254e-42)   Mv Bdry Jump_loss: tensor(2.9902e-28) SurfaceTension_loss: tensor(11.910
3)
Iteration: 4400   Total Loss: tensor(10000667.)
IC Loss: tensor(0.1000)   BC Loss: tensor(1.0805e-07)   NS PDE Loss: tensor(95.9975)   NS Div Free
Loss: tensor(1.4259e-35)   Mv Bdry Jump_loss: tensor(9.8939e-23) SurfaceTension_loss: tensor(10.947
6)
Iteration: 4600   Total Loss: tensor(627.7438)
IC Loss: tensor(1.4181e-06)   BC Loss: tensor(1.0192e-09)   NS PDE Loss: tensor(96.0001)   NS Div Free
Loss: tensor(1.2237e-37)   Mv Bdry Jump_loss: tensor(3.0800e-24) SurfaceTension_loss: tensor(7.798
7)
Iteration: 4800   Total Loss: tensor(507.1083)
IC Loss: tensor(1.1741e-07)   BC Loss: tensor(6.1996e-08)   NS PDE Loss: tensor(95.9987)   NS Div Free
Loss: tensor(4.2361e-42)   Mv Bdry Jump_loss: tensor(8.8619e-28) SurfaceTension_loss: tensor(7.987
4)
Iteration: 5000   Total Loss: tensor(622.4434)
IC Loss: tensor(4.4675e-08)   BC Loss: tensor(1.0997e-12)   NS PDE Loss: tensor(95.9944)   NS Div Free
Loss: tensor(3.0585e-41)   Mv Bdry Jump_loss: tensor(1.0334e-27) SurfaceTension_loss: tensor(10.439
6)
Iteration: 5200   Total Loss: tensor(474.5474)
IC Loss: tensor(6.2827e-08)   BC Loss: tensor(1.0526e-20)   NS PDE Loss: tensor(95.9981)   NS Div Free
Loss: tensor(2.3892e-42)   Mv Bdry Jump_loss: tensor(8.6055e-28) SurfaceTension_loss: tensor(7.445
3)
Iteration: 5400   Total Loss: tensor(430.5577)
IC Loss: tensor(1.0815e-06)   BC Loss: tensor(2.1190e-06)   NS PDE Loss: tensor(96.0057)   NS Div Free
Loss: tensor(2.2461e-37)   Mv Bdry Jump_loss: tensor(2.7199e-22) SurfaceTension_loss: tensor(4.528
1)

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Iteration: 5600        Total Loss: tensor(489.5862)
IC Loss:  tensor(1.5540e-06)    BC Loss:  tensor(3.0564e-06)    NS PDE Loss:  tensor(96.0037)   NS Div Free
Loss:  tensor(4.1200e-37)       Mv Bdry Jump_loss:  tensor(1.3127e-23)  SurfaceTension_loss:  tensor(4.763
6)
Iteration: 5800        Total Loss: tensor(350.0886)
IC Loss:  tensor(5.6191e-08)    BC Loss:  tensor(2.4474e-09)    NS PDE Loss:  tensor(96.0024)   NS Div Free
Loss:  tensor(1.0093e-35)       Mv Bdry Jump_loss:  tensor(6.9072e-24)  SurfaceTension_loss:  tensor(4.969
3)
Iteration: 6000        Total Loss: tensor(470.2892)
IC Loss:  tensor(7.3691e-08)    BC Loss:  tensor(7.3054e-14)    NS PDE Loss:  tensor(95.9973)   NS Div Free
Loss:  tensor(1.3332e-36)       Mv Bdry Jump_loss:  tensor(5.9425e-24)  SurfaceTension_loss:  tensor(7.338
5)
Iteration: 6200        Total Loss: tensor(666.6548)
IC Loss:  tensor(7.1873e-08)    BC Loss:  tensor(1.0136e-17)    NS PDE Loss:  tensor(95.9846)   NS Div Free
Loss:  tensor(3.2891e-36)       Mv Bdry Jump_loss:  tensor(6.6362e-24)  SurfaceTension_loss:  tensor(11.269
7)
Iteration: 6400        Total Loss: tensor(1381.0504)
IC Loss:  tensor(2.9412e-08)    BC Loss:  tensor(1.5127e-15)    NS PDE Loss:  tensor(95.9615)   NS Div Free
Loss:  tensor(5.7271e-35)       Mv Bdry Jump_loss:  tensor(9.8099e-24)  SurfaceTension_loss:  tensor(25.643
0)
Iteration: 6600        Total Loss: tensor(457.9593)
IC Loss:  tensor(1.9297e-08)    BC Loss:  tensor(6.5083e-18)    NS PDE Loss:  tensor(95.9945)   NS Div Free
Loss:  tensor(3.0630e-36)       Mv Bdry Jump_loss:  tensor(2.6281e-24)  SurfaceTension_loss:  tensor(7.200
7)
Iteration: 6800        Total Loss: tensor(371.7275)
IC Loss:  tensor(1.3815e-07)    BC Loss:  tensor(2.3985e-07)    NS PDE Loss:  tensor(96.0038)   NS Div Free
Loss:  tensor(2.7962e-35)       Mv Bdry Jump_loss:  tensor(8.8795e-23)  SurfaceTension_loss:  tensor(5.238
2)
Iteration: 7000        Total Loss: tensor(473.7669)
IC Loss:  tensor(1.6358e-08)    BC Loss:  tensor(2.1067e-09)    NS PDE Loss:  tensor(95.9979)   NS Div Free
Loss:  tensor(4.2401e-37)       Mv Bdry Jump_loss:  tensor(1.2013e-23)  SurfaceTension_loss:  tensor(7.522
7)
Iteration: 7200        Total Loss: tensor(612.3795)
IC Loss:  tensor(2.8447e-08)    BC Loss:  tensor(1.6781e-10)    NS PDE Loss:  tensor(95.9907)   NS Div Free
Loss:  tensor(2.6580e-38)       Mv Bdry Jump_loss:  tensor(1.3408e-24)  SurfaceTension_loss:  tensor(10.270
9)
Iteration: 7400        Total Loss: tensor(695.0118)
IC Loss:  tensor(4.4003e-08)    BC Loss:  tensor(2.6232e-10)    NS PDE Loss:  tensor(95.9783)   NS Div Free
Loss:  tensor(2.1570e-38)       Mv Bdry Jump_loss:  tensor(2.0218e-25)  SurfaceTension_loss:  tensor(11.892
7)
Iteration: 7600        Total Loss: tensor(473.3300)
IC Loss:  tensor(3.9722e-08)    BC Loss:  tensor(4.4035e-18)    NS PDE Loss:  tensor(95.9902)   NS Div Free
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Loss: tensor(5.2518e-38)   Mv Bdry Jump_loss: tensor(1.4184e-25) SurfaceTension_loss: tensor(7.467
4)
Iteration: 7800   Total Loss: tensor(432.0637)
IC Loss: tensor(2.3172e-08)   BC Loss: tensor(1.3118e-18)   NS PDE Loss: tensor(95.9928)   NS Div Free
Loss: tensor(4.1996e-38)   Mv Bdry Jump_loss: tensor(1.1975e-25) SurfaceTension_loss: tensor(6.675
1)
Iteration: 8000   Total Loss: tensor(380.1788)
IC Loss: tensor(2.0281e-08)   BC Loss: tensor(2.9521e-19)   NS PDE Loss: tensor(95.9957)   NS Div Free
Loss: tensor(3.6451e-38)   Mv Bdry Jump_loss: tensor(1.0214e-25) SurfaceTension_loss: tensor(5.643
1)
Iteration: 8200   Total Loss: tensor(412.4712)
IC Loss: tensor(2.7479e-08)   BC Loss: tensor(3.0074e-19)   NS PDE Loss: tensor(95.9918)   NS Div Free
Loss: tensor(4.7459e-38)   Mv Bdry Jump_loss: tensor(1.1148e-25) SurfaceTension_loss: tensor(6.274
6)
Iteration: 8400   Total Loss: tensor(372.5259)
IC Loss: tensor(3.4288e-07)   BC Loss: tensor(5.0865e-07)   NS PDE Loss: tensor(95.9984)   NS Div Free
Loss: tensor(7.5601e-37)   Mv Bdry Jump_loss: tensor(6.7284e-24) SurfaceTension_loss: tensor(4.844
8)
Iteration: 8600   Total Loss: tensor(561.1782)
IC Loss: tensor(2.3540e-07)   BC Loss: tensor(3.8251e-07)   NS PDE Loss: tensor(95.9999)   NS Div Free
Loss: tensor(1.2891e-35)   Mv Bdry Jump_loss: tensor(1.0253e-22) SurfaceTension_loss: tensor(8.832
8)
Iteration: 8800   Total Loss: tensor(359.6540)
IC Loss: tensor(2.5111e-07)   BC Loss: tensor(5.9095e-07)   NS PDE Loss: tensor(96.0064)   NS Div Free
Loss: tensor(6.5232e-37)   Mv Bdry Jump_loss: tensor(9.6268e-24) SurfaceTension_loss: tensor(4.770
7)
Iteration: 9000   Total Loss: tensor(367.2679)
IC Loss: tensor(4.0992e-08)   BC Loss: tensor(4.3825e-08)   NS PDE Loss: tensor(96.0052)   NS Div Free
Loss: tensor(5.6686e-37)   Mv Bdry Jump_loss: tensor(6.0445e-25) SurfaceTension_loss: tensor(5.343
3)
Iteration: 9200   Total Loss: tensor(970.3010)
IC Loss: tensor(9.4149e-07)   BC Loss: tensor(2.2175e-06)   NS PDE Loss: tensor(95.9730)   NS Div Free
Loss: tensor(2.1440e-36)   Mv Bdry Jump_loss: tensor(1.1555e-24) SurfaceTension_loss: tensor(15.603
6)
Iteration: 9400   Total Loss: tensor(1454.7825)
IC Loss: tensor(1.0516e-05)   BC Loss: tensor(4.1963e-05)   NS PDE Loss: tensor(96.0061)   NS Div Free
Loss: tensor(7.2970e-39)   Mv Bdry Jump_loss: tensor(9.2579e-25) SurfaceTension_loss: tensor(6.144
4)
Iteration: 9600   Total Loss: tensor(23390.4551)
IC Loss: tensor(0.0002)   BC Loss: tensor(3.6091e-07)   NS PDE Loss: tensor(96.0005)   NS Div Free
Loss: tensor(2.4485e-37)   Mv Bdry Jump_loss: tensor(1.2284e-24) SurfaceTension_loss: tensor(9.292
1)

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Iteration: 9800        Total Loss: tensor(1119.9347)
IC Loss:  tensor(6.1162e-06)    BC Loss:  tensor(2.3587e-05)    NS PDE Loss:  tensor(95.9918)   NS Div Free
Loss:  tensor(2.1511e-36)       Mv Bdry Jump_loss:  tensor(1.6034e-22)  SurfaceTension_loss:  tensor(8.246
5)
Iteration: 10000       Total Loss: tensor(685.2261)
IC Loss:  tensor(3.3401e-06)    BC Loss:  tensor(1.1667e-05)    NS PDE Loss:  tensor(95.9982)   NS Div Free
Loss:  tensor(3.3661e-36)       Mv Bdry Jump_loss:  tensor(6.7850e-24)  SurfaceTension_loss:  tensor(5.104
4)
Iteration: 10200       Total Loss: tensor(499.3983)
IC Loss:  tensor(2.9972e-08)    BC Loss:  tensor(9.2232e-09)    NS PDE Loss:  tensor(95.9898)   NS Div Free
Loss:  tensor(1.5934e-38)       Mv Bdry Jump_loss:  tensor(2.1676e-25)  SurfaceTension_loss:  tensor(8.008
2)
Iteration: 10400       Total Loss: tensor(1325.1143)
IC Loss:  tensor(4.7665e-06)    BC Loss:  tensor(1.7507e-08)    NS PDE Loss:  tensor(95.9905)   NS Div Free
Loss:  tensor(1.2352e-40)       Mv Bdry Jump_loss:  tensor(1.6620e-27)  SurfaceTension_loss:  tensor(15.049
5)
Iteration: 10600       Total Loss: tensor(734.2349)
IC Loss:  tensor(1.4038e-06)    BC Loss:  tensor(4.0687e-06)    NS PDE Loss:  tensor(96.0058)   NS Div Free
Loss:  tensor(1.1393e-42)       Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(9.9571)
Iteration: 10800       Total Loss: tensor(242.2539)
IC Loss:  tensor(1.6157e-08)    BC Loss:  tensor(2.5259e-08)    NS PDE Loss:  tensor(96.0040)   NS Div Free
Loss:  tensor(1.8067e-40)       Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(2.8927)
Iteration: 11000       Total Loss: tensor(520.0131)
IC Loss:  tensor(3.5878e-07)    BC Loss:  tensor(5.7861e-07)    NS PDE Loss:  tensor(95.9944)   NS Div Free
Loss:  tensor(4.9960e-40)       Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(7.7628)
Iteration: 11200       Total Loss: tensor(6204.8838)
IC Loss:  tensor(1.5366e-07)    BC Loss:  tensor(8.3360e-08)    NS PDE Loss:  tensor(95.9232)   NS Div Free
Loss:  tensor(3.0931e-34)       Mv Bdry Jump_loss:  tensor(2.0940e-20)  SurfaceTension_loss:  tensor(121.87
19)
Iteration: 11400       Total Loss: tensor(4.7292e+12)
IC Loss:  tensor(12.1655)       BC Loss:  tensor(3.9836e-05)    NS PDE Loss:  tensor(84.2540)   NS Div Free
Loss:  tensor(3.2911e-31)       Mv Bdry Jump_loss:  tensor(1.3731e-15)  SurfaceTension_loss:  tensor(9.4559
e+10)
Iteration: 11600       Total Loss: tensor(2940654.7500)
IC Loss:  tensor(0.0291)        BC Loss:  tensor(2.1738e-05)    NS PDE Loss:  tensor(95.8710)   NS Div Free
Loss:  tensor(2.8226e-36)       Mv Bdry Jump_loss:  tensor(4.9900e-21)  SurfaceTension_loss:  tensor(703.83
08)
Iteration: 11800       Total Loss: tensor(1849.6667)
IC Loss:  tensor(5.5761e-06)    BC Loss:  tensor(1.5618e-14)    NS PDE Loss:  tensor(95.9979)   NS Div Free
Loss:  tensor(4.8840e-37)       Mv Bdry Jump_loss:  tensor(1.6968e-22)  SurfaceTension_loss:  tensor(23.921
2)
Iteration: 12000       Total Loss: tensor(748.8627)
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IC Loss:  tensor(1.0194e-06)    BC Loss:  tensor(8.7621e-18)    NS PDE Loss:  tensor(96.0090)   NS Div Free
Loss:  tensor(9.9835e-38)     Mv Bdry Jump_loss:  tensor(1.3341e-22)  SurfaceTension_loss:  tensor(11.018
3)
Iteration: 12200      Total Loss: tensor(4599.5503)
IC Loss:  tensor(3.7474e-05)    BC Loss:  tensor(1.7506e-16)    NS PDE Loss:  tensor(96.0045)   NS Div Free
Loss:  tensor(2.2425e-37)     Mv Bdry Jump_loss:  tensor(1.5375e-22)  SurfaceTension_loss:  tensor(15.122
9)
Iteration: 12400      Total Loss: tensor(512.8536)
IC Loss:  tensor(5.7224e-07)    BC Loss:  tensor(2.5842e-16)    NS PDE Loss:  tensor(96.0105)   NS Div Free
Loss:  tensor(1.1636e-37)     Mv Bdry Jump_loss:  tensor(1.3568e-22)  SurfaceTension_loss:  tensor(7.192
4)
Iteration: 12600      Total Loss: tensor(480.3154)
IC Loss:  tensor(4.1619e-07)    BC Loss:  tensor(3.5377e-07)    NS PDE Loss:  tensor(96.0096)   NS Div Free
Loss:  tensor(8.7600e-37)     Mv Bdry Jump_loss:  tensor(5.5176e-21)  SurfaceTension_loss:  tensor(6.853
7)
Iteration: 12800      Total Loss: tensor(774.6058)
IC Loss:  tensor(1.4457e-06)    BC Loss:  tensor(2.4582e-07)    NS PDE Loss:  tensor(96.0145)   NS Div Free
Loss:  tensor(7.3877e-37)     Mv Bdry Jump_loss:  tensor(1.6371e-22)  SurfaceTension_loss:  tensor(10.680
4)
Iteration: 13000      Total Loss: tensor(846.7587)
IC Loss:  tensor(1.7165e-06)    BC Loss:  tensor(1.8020e-06)    NS PDE Loss:  tensor(96.0076)   NS Div Free
Loss:  tensor(1.7227e-36)     Mv Bdry Jump_loss:  tensor(1.6908e-22)  SurfaceTension_loss:  tensor(11.582
0)
Iteration: 13200      Total Loss: tensor(1439.0830)
IC Loss:  tensor(1.0002e-05)    BC Loss:  tensor(2.1330e-05)    NS PDE Loss:  tensor(96.0115)   NS Div Free
Loss:  tensor(2.2181e-37)     Mv Bdry Jump_loss:  tensor(2.5810e-22)  SurfaceTension_loss:  tensor(6.857
6)
Iteration: 13400      Total Loss: tensor(414.6011)
IC Loss:  tensor(1.1034e-07)    BC Loss:  tensor(1.5750e-09)    NS PDE Loss:  tensor(96.0124)   NS Div Free
Loss:  tensor(3.0887e-41)     Mv Bdry Jump_loss:  tensor(4.4481e-28)  SurfaceTension_loss:  tensor(6.151
1)
Iteration: 13600      Total Loss: tensor(493.5630)
IC Loss:  tensor(1.2288e-06)    BC Loss:  tensor(2.3316e-06)    NS PDE Loss:  tensor(96.0121)   NS Div Free
Loss:  tensor(7.5614e-41)     Mv Bdry Jump_loss:  tensor(3.0379e-26)  SurfaceTension_loss:  tensor(5.493
3)
Iteration: 13800      Total Loss: tensor(804.8138)
IC Loss:  tensor(2.5763e-07)    BC Loss:  tensor(4.6310e-09)    NS PDE Loss:  tensor(95.9991)   NS Div Free
Loss:  tensor(1.7513e-41)     Mv Bdry Jump_loss:  tensor(1.3552e-27)  SurfaceTension_loss:  tensor(13.661
0)
Iteration: 14000      Total Loss: tensor(371.1281)
IC Loss:  tensor(5.7246e-07)    BC Loss:  tensor(9.7472e-07)    NS PDE Loss:  tensor(96.0148)   NS Div Free
Loss:  tensor(4.6005e-42)     Mv Bdry Jump_loss:  tensor(2.4262e-27)  SurfaceTension_loss:  tensor(4.357
```

3)
Iteration: 14200   Total Loss: tensor(504.7405)
IC Loss: tensor(6.6040e-08)   BC Loss: tensor(1.1738e-09)   NS PDE Loss: tensor(96.0051)   NS Div Free
Loss: tensor(1.4933e-39)   Mv Bdry Jump_loss: tensor(9.9443e-29) SurfaceTension_loss: tensor(8.042
6)
Iteration: 14400   Total Loss: tensor(612.3902)
IC Loss: tensor(3.0245e-06)   BC Loss: tensor(1.1668e-05)   NS PDE Loss: tensor(96.0154)   NS Div Free
Loss: tensor(2.3362e-37)   Mv Bdry Jump_loss: tensor(2.0347e-24) SurfaceTension_loss: tensor(4.278
5)
Iteration: 14600   Total Loss: tensor(524.4944)
IC Loss: tensor(1.8575e-06)   BC Loss: tensor(7.1121e-06)   NS PDE Loss: tensor(96.0126)   NS Div Free
Loss: tensor(8.1193e-39)   Mv Bdry Jump_loss: tensor(5.9604e-31) SurfaceTension_loss: tensor(4.854
7)
Iteration: 14800   Total Loss: tensor(957.4854)
IC Loss: tensor(6.4624e-06)   BC Loss: tensor(1.3112e-05)   NS PDE Loss: tensor(96.0138)   NS Div Free
Loss: tensor(1.7163e-38)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(4.3046)
Iteration: 15000   Total Loss: tensor(1570.1334)
IC Loss: tensor(2.0920e-06)   BC Loss: tensor(3.8035e-06)   NS PDE Loss: tensor(95.9906)   NS Div Free
Loss: tensor(5.6445e-40)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(25.2990)
Iteration: 15200   Total Loss: tensor(540.6110)
IC Loss: tensor(1.6600e-07)   BC Loss: tensor(1.9043e-07)   NS PDE Loss: tensor(96.0061)   NS Div Free
Loss: tensor(5.1353e-41)   Mv Bdry Jump_loss: tensor(2.3210e-27) SurfaceTension_loss: tensor(8.560
1)
Iteration: 15400   Total Loss: tensor(433.8539)
IC Loss: tensor(2.0117e-07)   BC Loss: tensor(2.6436e-07)   NS PDE Loss: tensor(96.0098)   NS Div Free
Loss: tensor(7.4522e-41)   Mv Bdry Jump_loss: tensor(9.8019e-28) SurfaceTension_loss: tensor(6.354
5)
Iteration: 15600   Total Loss: tensor(642.7278)
IC Loss: tensor(3.1396e-06)   BC Loss: tensor(6.3351e-06)   NS PDE Loss: tensor(96.0134)   NS Div Free
Loss: tensor(2.0091e-37)   Mv Bdry Jump_loss: tensor(3.9836e-24) SurfaceTension_loss: tensor(4.655
0)
Iteration: 15800   Total Loss: tensor(557.8826)
IC Loss: tensor(4.7190e-07)   BC Loss: tensor(2.1683e-07)   NS PDE Loss: tensor(96.0066)   NS Div Free
Loss: tensor(3.0372e-34)   Mv Bdry Jump_loss: tensor(2.4147e-26) SurfaceTension_loss: tensor(8.293
7)
Iteration: 16000   Total Loss: tensor(501.7055)
IC Loss: tensor(5.1917e-07)   BC Loss: tensor(5.6287e-07)   NS PDE Loss: tensor(96.0109)   NS Div Free
Loss: tensor(4.0637e-39)   Mv Bdry Jump_loss: tensor(1.8132e-24) SurfaceTension_loss: tensor(7.075
6)
Iteration: 16200   Total Loss: tensor(457.7636)
IC Loss: tensor(3.5146e-07)   BC Loss: tensor(1.1161e-06)   NS PDE Loss: tensor(96.0105)   NS Div Free
Loss: tensor(7.0920e-42)   Mv Bdry Jump_loss: tensor(7.1030e-30) SurfaceTension_loss: tensor(6.532

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2)
Iteration: 16400      Total Loss: tensor(404.1368)
IC Loss:  tensor(1.9355e-07)    BC Loss:  tensor(1.2247e-07)    NS PDE Loss:  tensor(96.0106)   NS Div Free
Loss:  tensor(2.2029e-40)      Mv Bdry Jump_loss:  tensor(5.8255e-29) SurfaceTension_loss:  tensor(5.775
4)
Iteration: 16600      Total Loss: tensor(437.7148)
IC Loss:  tensor(1.1991e-06)    BC Loss:  tensor(2.8073e-06)    NS PDE Loss:  tensor(96.0135)   NS Div Free
Loss:  tensor(1.1872e-41)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(4.4359)
Iteration: 16800      Total Loss: tensor(594.7562)
IC Loss:  tensor(1.8154e-07)    BC Loss:  tensor(3.5963e-07)    NS PDE Loss:  tensor(96.0017)   NS Div Free
Loss:  tensor(2.2252e-38)      Mv Bdry Jump_loss:  tensor(4.8034e-25) SurfaceTension_loss:  tensor(9.612
0)
Iteration: 17000      Total Loss: tensor(387.7304)
IC Loss:  tensor(5.1904e-08)    BC Loss:  tensor(4.2949e-08)    NS PDE Loss:  tensor(96.0070)   NS Div Free
Loss:  tensor(1.1279e-40)      Mv Bdry Jump_loss:  tensor(3.0167e-27) SurfaceTension_loss:  tensor(5.730
7)
Iteration: 17200      Total Loss: tensor(405.9955)
IC Loss:  tensor(4.3583e-08)    BC Loss:  tensor(4.1537e-08)    NS PDE Loss:  tensor(96.0061)   NS Div Free
Loss:  tensor(1.6915e-40)      Mv Bdry Jump_loss:  tensor(5.3915e-29) SurfaceTension_loss:  tensor(6.112
6)
Iteration: 17400      Total Loss: tensor(40056700.)
IC Loss:  tensor(0.4004)       BC Loss:  tensor(0.0001)        NS PDE Loss:  tensor(96.0062)   NS Div Free
Loss:  tensor(5.8135e-33)      Mv Bdry Jump_loss:  tensor(6.3080e-21) SurfaceTension_loss:  tensor(241.34
05)
Iteration: 17600      Total Loss: tensor(462.4159)
IC Loss:  tensor(7.7954e-08)    BC Loss:  tensor(3.5588e-08)    NS PDE Loss:  tensor(96.0110)   NS Div Free
Loss:  tensor(2.1339e-33)      Mv Bdry Jump_loss:  tensor(1.1706e-22) SurfaceTension_loss:  tensor(7.172
2)
Iteration: 17800      Total Loss: tensor(592.9366)
IC Loss:  tensor(3.7643e-07)    BC Loss:  tensor(5.2074e-07)    NS PDE Loss:  tensor(96.0083)   NS Div Free
Loss:  tensor(2.8375e-36)      Mv Bdry Jump_loss:  tensor(1.3281e-25) SurfaceTension_loss:  tensor(9.185
7)
Iteration: 18000      Total Loss: tensor(619.3790)
IC Loss:  tensor(1.1863e-07)    BC Loss:  tensor(2.3925e-12)    NS PDE Loss:  tensor(96.0048)   NS Div Free
Loss:  tensor(8.3410e-39)      Mv Bdry Jump_loss:  tensor(2.0072e-25) SurfaceTension_loss:  tensor(10.230
2)
Iteration: 18200      Total Loss: tensor(8.2612e+08)
IC Loss:  tensor(7.6860)       BC Loss:  tensor(3.0823e-08)    NS PDE Loss:  tensor(94.3345)   NS Div Free
Loss:  tensor(6.6538e-35)      Mv Bdry Jump_loss:  tensor(8.5920e-21) SurfaceTension_loss:  tensor(115033
8.5000)
Iteration: 18400      Total Loss: tensor(6.7288e+08)
IC Loss:  tensor(6.7262)       BC Loss:  tensor(2.9888e-08)    NS PDE Loss:  tensor(95.8428)   NS Div Free
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Loss: tensor(2.1743e-37)   Mv Bdry Jump_loss: tensor(6.7702e-23) SurfaceTension_loss: tensor(5146.3
643)
Iteration: 18600   Total Loss: tensor(1.9645e+09)
IC Loss: tensor(9.6561)   BC Loss: tensor(2.4241e-08)   NS PDE Loss: tensor(88.3712)   NS Div Free
Loss: tensor(6.5299e-33)   Mv Bdry Jump_loss: tensor(3.5404e-19) SurfaceTension_loss: tensor(199767
84.)
Iteration: 18800   Total Loss: tensor(2.2470e+08)
IC Loss: tensor(2.2128)   BC Loss: tensor(2.0465e-08)   NS PDE Loss: tensor(95.5323)   NS Div Free
Loss: tensor(6.3996e-36)   Mv Bdry Jump_loss: tensor(3.6195e-23) SurfaceTension_loss: tensor(68535.
5938)
Iteration: 19000   Total Loss: tensor(2.5408e+08)
IC Loss: tensor(2.5357)   BC Loss: tensor(1.8430e-08)   NS PDE Loss: tensor(95.4652)   NS Div Free
Loss: tensor(4.5521e-36)   Mv Bdry Jump_loss: tensor(9.3407e-23) SurfaceTension_loss: tensor(10274.
7188)
Iteration: 19200   Total Loss: tensor(1.9526e+09)
IC Loss: tensor(3.0102)   BC Loss: tensor(1.6726e-08)   NS PDE Loss: tensor(89.8895)   NS Div Free
Loss: tensor(8.0941e-34)   Mv Bdry Jump_loss: tensor(2.1638e-21) SurfaceTension_loss: tensor(330323
44.)
Iteration: 19400   Total Loss: tensor(2.2054e+08)
IC Loss: tensor(2.1123)   BC Loss: tensor(1.5043e-08)   NS PDE Loss: tensor(95.2281)   NS Div Free
Loss: tensor(1.0827e-35)   Mv Bdry Jump_loss: tensor(4.0850e-22) SurfaceTension_loss: tensor(18624
0.3125)
Iteration: 19600   Total Loss: tensor(2.0127e+08)
IC Loss: tensor(2.0113)   BC Loss: tensor(8.2116e-09)   NS PDE Loss: tensor(95.6185)   NS Div Free
Loss: tensor(3.4145e-36)   Mv Bdry Jump_loss: tensor(4.2762e-23) SurfaceTension_loss: tensor(2711.3
999)
Iteration: 19800   Total Loss: tensor(2.3875e+08)
IC Loss: tensor(1.9376)   BC Loss: tensor(5.6155e-09)   NS PDE Loss: tensor(95.0894)   NS Div Free
Loss: tensor(7.5539e-36)   Mv Bdry Jump_loss: tensor(7.8542e-22) SurfaceTension_loss: tensor(89970
3.7500)
Iteration: 20000   Total Loss: tensor(79987136.)
IC Loss: tensor(0.7455)   BC Loss: tensor(1.8457e-09)   NS PDE Loss: tensor(95.6561)   NS Div Free
Loss: tensor(4.4609e-36)   Mv Bdry Jump_loss: tensor(2.4240e-23) SurfaceTension_loss: tensor(10884
0.5312)
Iteration: 20200   Total Loss: tensor(2.7385e+08)
IC Loss: tensor(2.1178)   BC Loss: tensor(1.7920e-09)   NS PDE Loss: tensor(94.9168)   NS Div Free
Loss: tensor(1.4356e-35)   Mv Bdry Jump_loss: tensor(4.9835e-22) SurfaceTension_loss: tensor(124129
1.8750)
Iteration: 20400   Total Loss: tensor(31689856.)
IC Loss: tensor(0.3168)   BC Loss: tensor(1.6548e-15)   NS PDE Loss: tensor(95.9154)   NS Div Free
Loss: tensor(2.7470e-36)   Mv Bdry Jump_loss: tensor(3.4652e-24) SurfaceTension_loss: tensor(288.67
43)

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Iteration: 20600      Total Loss: tensor(31164042.)
IC Loss:  tensor(0.3116)       BC Loss:  tensor(3.2845e-19)    NS PDE Loss:  tensor(95.9496)   NS Div Free
Loss:  tensor(6.9720e-37)      Mv Bdry Jump_loss:  tensor(1.6314e-24)  SurfaceTension_loss:  tensor(99.606
5)
Iteration: 20800      Total Loss: tensor(1055256.5000)
IC Loss:  tensor(0.0104)       BC Loss:  tensor(1.5619e-19)    NS PDE Loss:  tensor(95.9595)   NS Div Free
Loss:  tensor(7.0490e-37)      Mv Bdry Jump_loss:  tensor(1.4216e-24)  SurfaceTension_loss:  tensor(284.38
25)
Iteration: 21000      Total Loss: tensor(13443.9766)
IC Loss:  tensor(1.3224e-05)   BC Loss:  tensor(1.8336e-19)    NS PDE Loss:  tensor(95.9668)   NS Div Free
Loss:  tensor(2.4912e-37)      Mv Bdry Jump_loss:  tensor(5.6487e-24)  SurfaceTension_loss:  tensor(240.51
19)
Iteration: 21200      Total Loss: tensor(4454.3174)
IC Loss:  tensor(2.1560e-06)   BC Loss:  tensor(8.7146e-17)    NS PDE Loss:  tensor(95.9849)   NS Div Free
Loss:  tensor(2.7360e-37)      Mv Bdry Jump_loss:  tensor(8.8641e-25)  SurfaceTension_loss:  tensor(82.854
7)
Iteration: 21400      Total Loss: tensor(2981.1628)
IC Loss:  tensor(1.3846e-06)   BC Loss:  tensor(8.5184e-10)    NS PDE Loss:  tensor(95.9961)   NS Div Free
Loss:  tensor(1.5956e-37)      Mv Bdry Jump_loss:  tensor(6.1518e-25)  SurfaceTension_loss:  tensor(54.934
2)
Iteration: 21600      Total Loss: tensor(1864.8480)
IC Loss:  tensor(3.0897e-06)   BC Loss:  tensor(1.5267e-06)    NS PDE Loss:  tensor(95.9923)   NS Div Free
Loss:  tensor(1.1708e-32)      Mv Bdry Jump_loss:  tensor(2.7441e-20)  SurfaceTension_loss:  tensor(29.197
6)
Iteration: 21800      Total Loss: tensor(1890.3473)
IC Loss:  tensor(5.1149e-06)   BC Loss:  tensor(1.8310e-05)    NS PDE Loss:  tensor(95.9950)   NS Div Free
Loss:  tensor(2.5133e-34)      Mv Bdry Jump_loss:  tensor(6.4535e-22)  SurfaceTension_loss:  tensor(25.657
2)
Iteration: 22000      Total Loss: tensor(1555.8848)
IC Loss:  tensor(2.1250e-07)   BC Loss:  tensor(2.1945e-07)    NS PDE Loss:  tensor(95.9969)   NS Div Free
Loss:  tensor(1.0903e-34)      Mv Bdry Jump_loss:  tensor(9.4228e-23)  SurfaceTension_loss:  tensor(28.772
8)
Iteration: 22200      Total Loss: tensor(1672.1444)
IC Loss:  tensor(5.7917e-07)   BC Loss:  tensor(1.3299e-08)    NS PDE Loss:  tensor(95.9795)   NS Div Free
Loss:  tensor(3.2945e-37)      Mv Bdry Jump_loss:  tensor(8.8642e-25)  SurfaceTension_loss:  tensor(30.365
0)
Iteration: 22400      Total Loss: tensor(41601.9219)
IC Loss:  tensor(0.0003)       BC Loss:  tensor(2.2615e-08)    NS PDE Loss:  tensor(95.9142)   NS Div Free
Loss:  tensor(1.0617e-36)      Mv Bdry Jump_loss:  tensor(4.0202e-24)  SurfaceTension_loss:  tensor(245.91
96)
Iteration: 22600      Total Loss: tensor(752.1225)
IC Loss:  tensor(3.2750e-07)   BC Loss:  tensor(2.5649e-07)    NS PDE Loss:  tensor(95.9947)   NS Div Free
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Loss:  tensor(6.6576e-37)     Mv Bdry Jump_loss:  tensor(6.6521e-24)  SurfaceTension_loss:  tensor(12.467
6)
Iteration: 22800      Total Loss: tensor(793.1528)
IC Loss:  tensor(1.5315e-06)   BC Loss:  tensor(1.7275e-06)    NS PDE Loss:  tensor(95.9884)   NS Div Free
Loss:  tensor(1.5583e-35)     Mv Bdry Jump_loss:  tensor(4.0855e-26)  SurfaceTension_loss:  tensor(10.880
3)
Iteration: 23000      Total Loss: tensor(535.5249)
IC Loss:  tensor(2.7486e-07)   BC Loss:  tensor(9.1659e-07)    NS PDE Loss:  tensor(95.9973)   NS Div Free
Loss:  tensor(1.0944e-39)     Mv Bdry Jump_loss:  tensor(3.0366e-27)  SurfaceTension_loss:  tensor(8.240
8)
Iteration: 23200      Total Loss: tensor(597.7697)
IC Loss:  tensor(1.8851e-06)   BC Loss:  tensor(6.9934e-06)    NS PDE Loss:  tensor(96.0000)   NS Div Free
Loss:  tensor(1.1213e-39)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(6.2653)
Iteration: 23400      Total Loss: tensor(350.9785)
IC Loss:  tensor(3.6092e-07)   BC Loss:  tensor(6.1284e-07)    NS PDE Loss:  tensor(95.9906)   NS Div Free
Loss:  tensor(1.5728e-32)     Mv Bdry Jump_loss:  tensor(4.8556e-22)  SurfaceTension_loss:  tensor(4.377
9)
Iteration: 23600      Total Loss: tensor(868.1576)
IC Loss:  tensor(4.6229e-07)   BC Loss:  tensor(3.2767e-07)    NS PDE Loss:  tensor(95.9717)   NS Div Free
Loss:  tensor(8.4566e-34)     Mv Bdry Jump_loss:  tensor(4.9817e-22)  SurfaceTension_loss:  tensor(14.519
1)
Iteration: 23800      Total Loss: tensor(296.0895)
IC Loss:  tensor(4.9082e-07)   BC Loss:  tensor(9.4743e-07)    NS PDE Loss:  tensor(95.9897)   NS Div Free
Loss:  tensor(8.5249e-38)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(3.0203)
Iteration: 24000      Total Loss: tensor(143.7925)
IC Loss:  tensor(4.1945e-08)   BC Loss:  tensor(3.8838e-08)    NS PDE Loss:  tensor(95.9910)   NS Div Free
Loss:  tensor(2.5787e-40)     Mv Bdry Jump_loss:  tensor(7.2585e-25)  SurfaceTension_loss:  tensor(0.872
1)
Iteration: 24200      Total Loss: tensor(347.4210)
IC Loss:  tensor(1.6734e-07)   BC Loss:  tensor(2.3471e-08)    NS PDE Loss:  tensor(95.9900)   NS Div Free
Loss:  tensor(4.5910e-39)     Mv Bdry Jump_loss:  tensor(2.3940e-27)  SurfaceTension_loss:  tensor(4.693
9)
Iteration: 24400      Total Loss: tensor(487.7137)
IC Loss:  tensor(4.3789e-08)   BC Loss:  tensor(5.6181e-09)    NS PDE Loss:  tensor(95.9944)   NS Div Free
Loss:  tensor(4.5153e-39)     Mv Bdry Jump_loss:  tensor(3.9366e-28)  SurfaceTension_loss:  tensor(7.746
8)
Iteration: 24600      Total Loss: tensor(519.8465)
IC Loss:  tensor(3.7278e-07)   BC Loss:  tensor(7.3646e-07)    NS PDE Loss:  tensor(95.9743)   NS Div Free
Loss:  tensor(3.8650e-40)     Mv Bdry Jump_loss:  tensor(2.4512e-28)  SurfaceTension_loss:  tensor(7.731
9)
Iteration: 24800      Total Loss: tensor(568.6048)
IC Loss:  tensor(3.7574e-07)   BC Loss:  tensor(1.3997e-06)    NS PDE Loss:  tensor(95.9999)   NS Div Free
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Loss: tensor(4.4664e-36)   Mv Bdry Jump_loss: tensor(2.8988e-23) SurfaceTension_loss: tensor(8.700
6)
Iteration: 25000   Total Loss: tensor(1496.4113)
IC Loss: tensor(8.9858e-06)   BC Loss: tensor(1.5032e-09)   NS PDE Loss: tensor(96.0004)   NS Div Free
Loss: tensor(3.6608e-35)   Mv Bdry Jump_loss: tensor(1.5249e-23) SurfaceTension_loss: tensor(10.036
6)
Iteration: 25200   Total Loss: tensor(33357.5117)
IC Loss: tensor(0.0003)   BC Loss: tensor(1.2827e-06)   NS PDE Loss: tensor(95.9745)   NS Div Free
Loss: tensor(4.3853e-34)   Mv Bdry Jump_loss: tensor(3.6652e-23) SurfaceTension_loss: tensor(19.644
7)
Iteration: 25400   Total Loss: tensor(501.0281)
IC Loss: tensor(1.5757e-06)   BC Loss: tensor(6.0259e-06)   NS PDE Loss: tensor(95.9924)   NS Div Free
Loss: tensor(3.4825e-36)   Mv Bdry Jump_loss: tensor(1.8267e-23) SurfaceTension_loss: tensor(4.949
3)
Iteration: 25600   Total Loss: tensor(166.0778)
IC Loss: tensor(5.3756e-08)   BC Loss: tensor(1.3075e-07)   NS PDE Loss: tensor(95.9988)   NS Div Free
Loss: tensor(3.1228e-36)   Mv Bdry Jump_loss: tensor(1.9900e-21) SurfaceTension_loss: tensor(1.294
1)
Iteration: 25800   Total Loss: tensor(261.6823)
IC Loss: tensor(1.9401e-07)   BC Loss: tensor(3.4679e-07)   NS PDE Loss: tensor(95.9973)   NS Div Free
Loss: tensor(1.7737e-38)   Mv Bdry Jump_loss: tensor(8.7348e-26) SurfaceTension_loss: tensor(2.925
7)
Iteration: 26000   Total Loss: tensor(1031.4030)
IC Loss: tensor(8.1343e-06)   BC Loss: tensor(2.9510e-05)   NS PDE Loss: tensor(96.0014)   NS Div Free
Loss: tensor(2.3150e-37)   Mv Bdry Jump_loss: tensor(1.7798e-22) SurfaceTension_loss: tensor(2.439
3)
Iteration: 26200   Total Loss: tensor(394.0029)
IC Loss: tensor(1.1460e-08)   BC Loss: tensor(5.7989e-09)   NS PDE Loss: tensor(96.0010)   NS Div Free
Loss: tensor(1.8919e-38)   Mv Bdry Jump_loss: tensor(1.0202e-25) SurfaceTension_loss: tensor(5.937
1)
Iteration: 26400   Total Loss: tensor(327.2473)
IC Loss: tensor(3.2988e-07)   BC Loss: tensor(1.2152e-06)   NS PDE Loss: tensor(95.9961)   NS Div Free
Loss: tensor(3.0045e-38)   Mv Bdry Jump_loss: tensor(1.0716e-25) SurfaceTension_loss: tensor(3.965
3)
Iteration: 26600   Total Loss: tensor(880.8660)
IC Loss: tensor(2.3751e-06)   BC Loss: tensor(9.4113e-06)   NS PDE Loss: tensor(95.9942)   NS Div Free
Loss: tensor(9.8495e-39)   Mv Bdry Jump_loss: tensor(1.5857e-25) SurfaceTension_loss: tensor(10.947
3)
Iteration: 26800   Total Loss: tensor(566.6064)
IC Loss: tensor(5.8472e-08)   BC Loss: tensor(1.9509e-07)   NS PDE Loss: tensor(96.0032)   NS Div Free
Loss: tensor(8.6326e-40)   Mv Bdry Jump_loss: tensor(7.1881e-28) SurfaceTension_loss: tensor(9.295
1)

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Iteration: 27000        Total Loss: tensor(315.5474)
IC Loss:  tensor(6.2772e-07)    BC Loss:  tensor(1.3795e-06)    NS PDE Loss:  tensor(96.0072)   NS Div Free
Loss:  tensor(2.2812e-39)       Mv Bdry Jump_loss:  tensor(3.3297e-26)  SurfaceTension_loss:  tensor(3.135
4)
Iteration: 27200        Total Loss: tensor(278.6197)
IC Loss:  tensor(1.4802e-06)    BC Loss:  tensor(3.4603e-06)    NS PDE Loss:  tensor(95.9999)   NS Div Free
Loss:  tensor(2.5802e-33)       Mv Bdry Jump_loss:  tensor(7.5473e-25)  SurfaceTension_loss:  tensor(0.692
0)
Iteration: 27400        Total Loss: tensor(874.5244)
IC Loss:  tensor(1.9021e-06)    BC Loss:  tensor(3.7706e-06)    NS PDE Loss:  tensor(96.0042)   NS Div Free
Loss:  tensor(2.8100e-37)       Mv Bdry Jump_loss:  tensor(4.1753e-23)  SurfaceTension_loss:  tensor(11.766
1)
Iteration: 27600        Total Loss: tensor(1348.7266)
IC Loss:  tensor(1.5777e-07)    BC Loss:  tensor(9.1688e-09)    NS PDE Loss:  tensor(95.9939)   NS Div Free
Loss:  tensor(4.0931e-40)       Mv Bdry Jump_loss:  tensor(1.3620e-26)  SurfaceTension_loss:  tensor(24.739
1)
Iteration: 27800        Total Loss: tensor(584.0671)
IC Loss:  tensor(1.0109e-07)    BC Loss:  tensor(1.6941e-08)    NS PDE Loss:  tensor(96.0001)   NS Div Free
Loss:  tensor(8.6504e-38)       Mv Bdry Jump_loss:  tensor(1.7042e-23)  SurfaceTension_loss:  tensor(9.559
2)
Iteration: 28000        Total Loss: tensor(710.8617)
IC Loss:  tensor(4.0721e-06)    BC Loss:  tensor(1.6180e-05)    NS PDE Loss:  tensor(96.0139)   NS Div Free
Loss:  tensor(1.0705e-41)       Mv Bdry Jump_loss:  tensor(5.5727e-29)  SurfaceTension_loss:  tensor(4.152
7)
Iteration: 28200        Total Loss: tensor(238.6955)
IC Loss:  tensor(7.5288e-08)    BC Loss:  tensor(2.2174e-07)    NS PDE Loss:  tensor(96.0083)   NS Div Free
Loss:  tensor(8.3383e-38)       Mv Bdry Jump_loss:  tensor(2.9063e-22)  SurfaceTension_loss:  tensor(2.703
2)
Iteration: 28400        Total Loss: tensor(254.8553)
IC Loss:  tensor(7.0788e-08)    BC Loss:  tensor(1.2147e-07)    NS PDE Loss:  tensor(95.9949)   NS Div Free
Loss:  tensor(2.7722e-41)       Mv Bdry Jump_loss:  tensor(3.6320e-27)  SurfaceTension_loss:  tensor(3.035
6)
Iteration: 28600        Total Loss: tensor(1688.6598)
IC Loss:  tensor(1.4524e-08)    BC Loss:  tensor(8.3064e-09)    NS PDE Loss:  tensor(96.0073)   NS Div Free
Loss:  tensor(1.3749e-40)       Mv Bdry Jump_loss:  tensor(9.1637e-32)  SurfaceTension_loss:  tensor(31.824
0)
Iteration: 28800        Total Loss: tensor(2044.9396)
IC Loss:  tensor(2.9879e-09)    BC Loss:  tensor(2.1611e-09)    NS PDE Loss:  tensor(95.9663)   NS Div Free
Loss:  tensor(7.2868e-40)       Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(38.9735)
Iteration: 29000        Total Loss: tensor(283.3199)
IC Loss:  tensor(5.8939e-07)    BC Loss:  tensor(1.1724e-06)    NS PDE Loss:  tensor(95.9872)   NS Div Free
Loss:  tensor(4.3876e-41)       Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(2.5679)
```

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Iteration: 29200        Total Loss: tensor(1561.8898)
IC Loss:  tensor(1.1286e-07)   BC Loss:  tensor(4.2793e-07)   NS PDE Loss:  tensor(95.9919)   NS Div Free
Loss:  tensor(3.6362e-37)       Mv Bdry Jump_loss:  tensor(1.2702e-24)  SurfaceTension_loss:  tensor(29.092
2)
Iteration: 29400        Total Loss: tensor(345.5817)
IC Loss:  tensor(3.3229e-07)   BC Loss:  tensor(1.1369e-06)   NS PDE Loss:  tensor(95.9738)   NS Div Free
Loss:  tensor(2.9600e-38)       Mv Bdry Jump_loss:  tensor(5.1700e-23)  SurfaceTension_loss:  tensor(4.327
6)
Iteration: 29600        Total Loss: tensor(168.2452)
IC Loss:  tensor(1.4724e-07)   BC Loss:  tensor(5.8135e-07)   NS PDE Loss:  tensor(95.9952)   NS Div Free
Loss:  tensor(1.5041e-39)       Mv Bdry Jump_loss:  tensor(1.0526e-26)  SurfaceTension_loss:  tensor(1.150
5)
Iteration: 29800        Total Loss: tensor(349.3036)
IC Loss:  tensor(4.9584e-07)   BC Loss:  tensor(1.1701e-06)   NS PDE Loss:  tensor(95.9685)   NS Div Free
Loss:  tensor(6.4340e-34)       Mv Bdry Jump_loss:  tensor(4.2181e-26)  SurfaceTension_loss:  tensor(4.075
0)
Iteration: 30000        Total Loss: tensor(246.9866)
IC Loss:  tensor(9.5241e-07)   BC Loss:  tensor(3.7994e-06)   NS PDE Loss:  tensor(95.9945)   NS Div Free
Loss:  tensor(1.0892e-35)       Mv Bdry Jump_loss:  tensor(1.0691e-26)  SurfaceTension_loss:  tensor(1.115
0)
Iteration: 30200        Total Loss: tensor(820.2444)
IC Loss:  tensor(1.0217e-06)   BC Loss:  tensor(1.2406e-13)   NS PDE Loss:  tensor(95.9919)   NS Div Free
Loss:  tensor(3.1510e-35)       Mv Bdry Jump_loss:  tensor(6.1120e-26)  SurfaceTension_loss:  tensor(12.441
7)
Iteration: 30400        Total Loss: tensor(165.3635)
IC Loss:  tensor(1.8683e-08)   BC Loss:  tensor(5.1715e-08)   NS PDE Loss:  tensor(95.9882)   NS Div Free
Loss:  tensor(7.0851e-37)       Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(1.3501)
Iteration: 30600        Total Loss: tensor(292.8181)
IC Loss:  tensor(3.1949e-08)   BC Loss:  tensor(6.0469e-08)   NS PDE Loss:  tensor(95.9864)   NS Div Free
Loss:  tensor(1.5847e-39)       Mv Bdry Jump_loss:  tensor(4.2331e-29)  SurfaceTension_loss:  tensor(3.872
7)
Iteration: 30800        Total Loss: tensor(163.6612)
IC Loss:  tensor(1.0293e-07)   BC Loss:  tensor(2.1185e-07)   NS PDE Loss:  tensor(95.9933)   NS Div Free
Loss:  tensor(1.1890e-40)       Mv Bdry Jump_loss:  tensor(3.5636e-40)  SurfaceTension_loss:  tensor(1.147
5)
Iteration: 31000        Total Loss: tensor(359.8769)
IC Loss:  tensor(1.2268e-06)   BC Loss:  tensor(2.4577e-06)   NS PDE Loss:  tensor(96.0058)   NS Div Free
Loss:  tensor(1.6695e-36)       Mv Bdry Jump_loss:  tensor(9.0002e-25)  SurfaceTension_loss:  tensor(2.823
8)
Iteration: 31200        Total Loss: tensor(162.0959)
IC Loss:  tensor(1.5176e-07)   BC Loss:  tensor(2.9353e-07)   NS PDE Loss:  tensor(95.9970)   NS Div Free
Loss:  tensor(1.2442e-41)       Mv Bdry Jump_loss:  tensor(1.8472e-27)  SurfaceTension_loss:  tensor(1.018
```

5)
Iteration: 31400   Total Loss: tensor(139.3047)
IC Loss: tensor(9.7076e-08)   BC Loss: tensor(1.9136e-07)   NS PDE Loss: tensor(95.9929)   NS Div Free
Loss: tensor(4.1592e-37)   Mv Bdry Jump_loss: tensor(5.7939e-23) SurfaceTension_loss: tensor(0.672
1)
Iteration: 31600   Total Loss: tensor(223.1942)
IC Loss: tensor(5.3222e-08)   BC Loss: tensor(1.2791e-07)   NS PDE Loss: tensor(96.0003)   NS Div Free
Loss: tensor(2.1848e-36)   Mv Bdry Jump_loss: tensor(3.4533e-22) SurfaceTension_loss: tensor(2.437
4)
Iteration: 31800   Total Loss: tensor(142.2694)
IC Loss: tensor(2.9800e-07)   BC Loss: tensor(6.6340e-07)   NS PDE Loss: tensor(96.0021)   NS Div Free
Loss: tensor(2.1277e-38)   Mv Bdry Jump_loss: tensor(6.7528e-26) SurfaceTension_loss: tensor(0.329
3)
Iteration: 32000   Total Loss: tensor(216.4332)
IC Loss: tensor(1.0647e-06)   BC Loss: tensor(2.1276e-06)   NS PDE Loss: tensor(96.0026)   NS Div Free
Loss: tensor(6.1134e-37)   Mv Bdry Jump_loss: tensor(2.8327e-24) SurfaceTension_loss: tensor(0.279
2)
Iteration: 32200   Total Loss: tensor(131.7902)
IC Loss: tensor(2.2722e-07)   BC Loss: tensor(9.0241e-07)   NS PDE Loss: tensor(96.0023)   NS Div Free
Loss: tensor(2.2318e-36)   Mv Bdry Jump_loss: tensor(1.6381e-23) SurfaceTension_loss: tensor(0.261
3)
Iteration: 32400   Total Loss: tensor(125.7698)
IC Loss: tensor(1.4086e-07)   BC Loss: tensor(2.7963e-07)   NS PDE Loss: tensor(96.0033)   NS Div Free
Loss: tensor(5.7594e-36)   Mv Bdry Jump_loss: tensor(6.2710e-24) SurfaceTension_loss: tensor(0.313
6)
Iteration: 32600   Total Loss: tensor(662.3802)
IC Loss: tensor(1.1485e-07)   BC Loss: tensor(1.1401e-08)   NS PDE Loss: tensor(95.9987)   NS Div Free
Loss: tensor(4.2490e-36)   Mv Bdry Jump_loss: tensor(1.4006e-24) SurfaceTension_loss: tensor(11.097
9)
Iteration: 32800   Total Loss: tensor(364.4907)
IC Loss: tensor(1.5273e-08)   BC Loss: tensor(5.7529e-12)   NS PDE Loss: tensor(96.0055)   NS Div Free
Loss: tensor(1.9303e-36)   Mv Bdry Jump_loss: tensor(1.7934e-24) SurfaceTension_loss: tensor(5.339
2)
Iteration: 33000   Total Loss: tensor(1.5575e+09)
IC Loss: tensor(0.4317)   BC Loss: tensor(2.8375e-10)   NS PDE Loss: tensor(91.1074)   NS Div Free
Loss: tensor(2.0493e-31)   Mv Bdry Jump_loss: tensor(2.4273e-19) SurfaceTension_loss: tensor(302867
18.)
Iteration: 33200   Total Loss: tensor(1900.0237)
IC Loss: tensor(3.8987e-07)   BC Loss: tensor(1.3473e-13)   NS PDE Loss: tensor(95.9931)   NS Div Free
Loss: tensor(3.6661e-36)   Mv Bdry Jump_loss: tensor(1.4883e-23) SurfaceTension_loss: tensor(35.300
9)
Iteration: 33400   Total Loss: tensor(53907.1406)

IC Loss: tensor(0.0004)   BC Loss: tensor(8.8201e-16)   NS PDE Loss: tensor(95.9388)   NS Div Free
Loss: tensor(6.7991e-35)   Mv Bdry Jump_loss: tensor(6.4474e-23) SurfaceTension_loss: tensor(297.97
80)
Iteration: 33600   Total Loss: tensor(585.2127)
IC Loss: tensor(2.0614e-07)   BC Loss: tensor(3.7857e-18)   NS PDE Loss: tensor(96.0090)   NS Div Free
Loss: tensor(5.7016e-37)   Mv Bdry Jump_loss: tensor(8.8514e-25) SurfaceTension_loss: tensor(9.371
8)
Iteration: 33800   Total Loss: tensor(645.6043)
IC Loss: tensor(1.4603e-08)   BC Loss: tensor(9.6846e-09)   NS PDE Loss: tensor(96.0010)   NS Div Free
Loss: tensor(2.5795e-36)   Mv Bdry Jump_loss: tensor(1.5721e-24) SurfaceTension_loss: tensor(10.962
9)
Iteration: 34000   Total Loss: tensor(548.0092)
IC Loss: tensor(1.6567e-06)   BC Loss: tensor(3.3150e-06)   NS PDE Loss: tensor(96.0127)   NS Div Free
Loss: tensor(6.7689e-37)   Mv Bdry Jump_loss: tensor(1.6648e-25) SurfaceTension_loss: tensor(5.726
6)
Iteration: 34200   Total Loss: tensor(2941.4111)
IC Loss: tensor(1.8696e-07)   BC Loss: tensor(1.2573e-07)   NS PDE Loss: tensor(96.0071)   NS Div Free
Loss: tensor(2.0680e-38)   Mv Bdry Jump_loss: tensor(2.2912e-27) SurfaceTension_loss: tensor(56.534
2)
Iteration: 34400   Total Loss: tensor(315.9456)
IC Loss: tensor(5.3289e-08)   BC Loss: tensor(2.0512e-07)   NS PDE Loss: tensor(96.0133)   NS Div Free
Loss: tensor(1.8686e-38)   Mv Bdry Jump_loss: tensor(1.9710e-23) SurfaceTension_loss: tensor(4.292
1)
Iteration: 34600   Total Loss: tensor(555.5167)
IC Loss: tensor(1.4199e-07)   BC Loss: tensor(4.6967e-07)   NS PDE Loss: tensor(96.0057)   NS Div Free
Loss: tensor(1.5523e-38)   Mv Bdry Jump_loss: tensor(1.1816e-23) SurfaceTension_loss: tensor(8.906
2)
Iteration: 34800   Total Loss: tensor(506.4266)
IC Loss: tensor(7.3299e-07)   BC Loss: tensor(2.9018e-06)   NS PDE Loss: tensor(96.0087)   NS Div Free
Loss: tensor(1.2749e-39)   Mv Bdry Jump_loss: tensor(3.2509e-26) SurfaceTension_loss: tensor(6.742
4)
Iteration: 35000   Total Loss: tensor(294.0360)
IC Loss: tensor(3.4431e-08)   BC Loss: tensor(1.3012e-07)   NS PDE Loss: tensor(96.0145)   NS Div Free
Loss: tensor(7.8192e-43)   Mv Bdry Jump_loss: tensor(6.5948e-28) SurfaceTension_loss: tensor(3.891
6)
Iteration: 35200   Total Loss: tensor(6510.4634)
IC Loss: tensor(4.6854e-08)   BC Loss: tensor(3.2978e-08)   NS PDE Loss: tensor(95.9283)   NS Div Free
Loss: tensor(7.6373e-34)   Mv Bdry Jump_loss: tensor(2.7547e-22) SurfaceTension_loss: tensor(128.19
70)
Iteration: 35400   Total Loss: tensor(462.7756)
IC Loss: tensor(1.6828e-08)   BC Loss: tensor(5.4962e-10)   NS PDE Loss: tensor(96.0052)   NS Div Free
Loss: tensor(1.3652e-38)   Mv Bdry Jump_loss: tensor(1.9020e-25) SurfaceTension_loss: tensor(7.301

8)
Iteration: 35600   Total Loss: tensor(3147.7759)
IC Loss: tensor(4.1069e-06)   BC Loss: tensor(3.6304e-07)   NS PDE Loss: tensor(95.9860)   NS Div Free
Loss: tensor(3.2428e-36)   Mv Bdry Jump_loss: tensor(6.3534e-23) SurfaceTension_loss: tensor(52.821
9)
Iteration: 35800   Total Loss: tensor(284.7010)
IC Loss: tensor(3.7089e-07)   BC Loss: tensor(7.3490e-07)   NS PDE Loss: tensor(96.0214)   NS Div Free
Loss: tensor(6.8274e-37)   Mv Bdry Jump_loss: tensor(5.9949e-23) SurfaceTension_loss: tensor(3.031
8)
Iteration: 36000   Total Loss: tensor(321.8356)
IC Loss: tensor(4.6285e-07)   BC Loss: tensor(1.7835e-06)   NS PDE Loss: tensor(96.0184)   NS Div Free
Loss: tensor(1.5838e-36)   Mv Bdry Jump_loss: tensor(8.6257e-23) SurfaceTension_loss: tensor(3.590
6)
Iteration: 36200   Total Loss: tensor(287.9691)
IC Loss: tensor(8.8101e-07)   BC Loss: tensor(1.7621e-06)   NS PDE Loss: tensor(96.0199)   NS Div Free
Loss: tensor(4.1816e-34)   Mv Bdry Jump_loss: tensor(1.8222e-25) SurfaceTension_loss: tensor(2.077
0)
Iteration: 36400   Total Loss: tensor(1108.0160)
IC Loss: tensor(4.3449e-06)   BC Loss: tensor(8.7985e-06)   NS PDE Loss: tensor(96.0028)   NS Div Free
Loss: tensor(1.7067e-39)   Mv Bdry Jump_loss: tensor(5.3644e-25) SurfaceTension_loss: tensor(11.550
4)
Iteration: 36600   Total Loss: tensor(412.2330)
IC Loss: tensor(1.5687e-09)   BC Loss: tensor(7.5828e-11)   NS PDE Loss: tensor(96.0045)   NS Div Free
Loss: tensor(8.6372e-41)   Mv Bdry Jump_loss: tensor(8.5115e-26) SurfaceTension_loss: tensor(6.321
4)
Iteration: 36800   Total Loss: tensor(216.8162)
IC Loss: tensor(8.7369e-08)   BC Loss: tensor(2.8080e-07)   NS PDE Loss: tensor(96.0184)   NS Div Free
Loss: tensor(1.4105e-41)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(2.2412)
Iteration: 37000   Total Loss: tensor(336.2106)
IC Loss: tensor(8.6516e-08)   BC Loss: tensor(3.0779e-07)   NS PDE Loss: tensor(96.0160)   NS Div Free
Loss: tensor(1.9992e-41)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(4.6309)
Iteration: 37200   Total Loss: tensor(289.5138)
IC Loss: tensor(3.8979e-08)   BC Loss: tensor(3.3229e-08)   NS PDE Loss: tensor(96.0155)   NS Div Free
Loss: tensor(2.4136e-41)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(3.7920)
Iteration: 37400   Total Loss: tensor(266.6277)
IC Loss: tensor(8.9425e-08)   BC Loss: tensor(1.7114e-07)   NS PDE Loss: tensor(96.0156)   NS Div Free
Loss: tensor(4.0431e-40)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(3.2334)
Iteration: 37600   Total Loss: tensor(367.1442)
IC Loss: tensor(3.2529e-08)   BC Loss: tensor(4.2797e-08)   NS PDE Loss: tensor(96.0134)   NS Div Free
Loss: tensor(3.4892e-43)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(5.3576)
Iteration: 37800   Total Loss: tensor(642.5673)
IC Loss: tensor(2.4077e-07)   BC Loss: tensor(3.9206e-07)   NS PDE Loss: tensor(96.0025)   NS Div Free

Loss: tensor(2.5705e-40)   Mv Bdry Jump_loss: tensor(6.5005e-27) SurfaceTension_loss: tensor(10.449
7)
Iteration: 38000   Total Loss: tensor(418.3613)
IC Loss: tensor(3.2594e-07)   BC Loss: tensor(6.5824e-07)   NS PDE Loss: tensor(96.0126)   NS Div Free
Loss: tensor(4.0894e-35)   Mv Bdry Jump_loss: tensor(2.0044e-23) SurfaceTension_loss: tensor(5.795
1)
Iteration: 38200   Total Loss: tensor(790.8238)
IC Loss: tensor(1.4904e-06)   BC Loss: tensor(1.4505e-08)   NS PDE Loss: tensor(96.0153)   NS Div Free
Loss: tensor(3.8540e-35)   Mv Bdry Jump_loss: tensor(1.3174e-23) SurfaceTension_loss: tensor(10.915
3)
Iteration: 38400   Total Loss: tensor(363.1739)
IC Loss: tensor(3.1802e-07)   BC Loss: tensor(1.2532e-06)   NS PDE Loss: tensor(96.0167)   NS Div Free
Loss: tensor(3.0332e-35)   Mv Bdry Jump_loss: tensor(1.1685e-23) SurfaceTension_loss: tensor(4.707
1)
Iteration: 38600   Total Loss: tensor(681.1138)
IC Loss: tensor(2.6792e-06)   BC Loss: tensor(5.3452e-06)   NS PDE Loss: tensor(96.0115)   NS Div Free
Loss: tensor(7.6591e-36)   Mv Bdry Jump_loss: tensor(5.4490e-24) SurfaceTension_loss: tensor(6.343
6)
Iteration: 38800   Total Loss: tensor(2372.0562)
IC Loss: tensor(1.5967e-05)   BC Loss: tensor(1.3994e-09)   NS PDE Loss: tensor(96.0044)   NS Div Free
Loss: tensor(3.7922e-35)   Mv Bdry Jump_loss: tensor(6.4021e-24) SurfaceTension_loss: tensor(13.586
3)
Iteration: 39000   Total Loss: tensor(290.9327)
IC Loss: tensor(1.4119e-08)   BC Loss: tensor(2.2077e-08)   NS PDE Loss: tensor(96.0176)   NS Div Free
Loss: tensor(1.0031e-36)   Mv Bdry Jump_loss: tensor(1.8743e-24) SurfaceTension_loss: tensor(3.870
1)
Iteration: 39200   Total Loss: tensor(95124.3906)
IC Loss: tensor(0.0009)   BC Loss: tensor(1.8145e-05)   NS PDE Loss: tensor(95.9448)   NS Div Free
Loss: tensor(3.2472e-40)   Mv Bdry Jump_loss: tensor(2.1525e-23) SurfaceTension_loss: tensor(68.184
8)
Iteration: 39400   Total Loss: tensor(355.8848)
IC Loss: tensor(1.0492e-06)   BC Loss: tensor(4.1323e-06)   NS PDE Loss: tensor(96.0161)   NS Div Free
Loss: tensor(3.1316e-36)   Mv Bdry Jump_loss: tensor(1.8096e-24) SurfaceTension_loss: tensor(3.099
0)
Iteration: 39600   Total Loss: tensor(258.5732)
IC Loss: tensor(1.5913e-08)   BC Loss: tensor(5.1204e-08)   NS PDE Loss: tensor(96.0134)   NS Div Free
Loss: tensor(5.9138e-37)   Mv Bdry Jump_loss: tensor(7.9396e-25) SurfaceTension_loss: tensor(3.219
4)
Iteration: 39800   Total Loss: tensor(381.1859)
IC Loss: tensor(1.3622e-06)   BC Loss: tensor(2.7237e-06)   NS PDE Loss: tensor(96.0166)   NS Div Free
Loss: tensor(1.9758e-37)   Mv Bdry Jump_loss: tensor(7.9796e-26) SurfaceTension_loss: tensor(2.979
0)

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Iteration: 40000        Total Loss: tensor(456.1422)
IC Loss:  tensor(7.9623e-07)   BC Loss:  tensor(1.1829e-06)   NS PDE Loss:  tensor(96.0160)   NS Div Free
Loss:  tensor(1.0800e-37)       Mv Bdry Jump_loss:  tensor(4.1479e-23)  SurfaceTension_loss:  tensor(5.610
1)
Iteration: 40200        Total Loss: tensor(416.3362)
IC Loss:  tensor(1.0354e-06)   BC Loss:  tensor(3.2018e-06)   NS PDE Loss:  tensor(96.0151)   NS Div Free
Loss:  tensor(2.9692e-35)       Mv Bdry Jump_loss:  tensor(9.1752e-28)  SurfaceTension_loss:  tensor(4.335
5)
Iteration: 40400        Total Loss: tensor(280.4319)
IC Loss:  tensor(3.2090e-08)   BC Loss:  tensor(1.1938e-07)   NS PDE Loss:  tensor(96.0145)   NS Div Free
Loss:  tensor(4.6699e-40)       Mv Bdry Jump_loss:  tensor(5.5227e-26)  SurfaceTension_loss:  tensor(3.624
2)
Iteration: 40600        Total Loss: tensor(650.6935)
IC Loss:  tensor(1.6621e-06)   BC Loss:  tensor(6.6426e-06)   NS PDE Loss:  tensor(96.0135)   NS Div Free
Loss:  tensor(5.3569e-38)       Mv Bdry Jump_loss:  tensor(1.6692e-25)  SurfaceTension_loss:  tensor(7.769
4)
Iteration: 40800        Total Loss: tensor(285.0541)
IC Loss:  tensor(4.0244e-07)   BC Loss:  tensor(1.2264e-06)   NS PDE Loss:  tensor(96.0164)   NS Div Free
Loss:  tensor(6.0967e-39)       Mv Bdry Jump_loss:  tensor(1.2132e-24)  SurfaceTension_loss:  tensor(2.975
9)
Iteration: 41000        Total Loss: tensor(297.7736)
IC Loss:  tensor(1.1892e-08)   BC Loss:  tensor(3.8468e-08)   NS PDE Loss:  tensor(96.0115)   NS Div Free
Loss:  tensor(5.4852e-41)       Mv Bdry Jump_loss:  tensor(6.8445e-28)  SurfaceTension_loss:  tensor(4.011
5)
Iteration: 41200        Total Loss: tensor(567.5015)
IC Loss:  tensor(2.4483e-06)   BC Loss:  tensor(4.9289e-06)   NS PDE Loss:  tensor(96.0157)   NS Div Free
Loss:  tensor(7.8934e-37)       Mv Bdry Jump_loss:  tensor(2.8741e-24)  SurfaceTension_loss:  tensor(4.533
2)
Iteration: 41400        Total Loss: tensor(22724.6426)
IC Loss:  tensor(0.0002)       BC Loss:  tensor(5.8766e-05)   NS PDE Loss:  tensor(96.0201)   NS Div Free
Loss:  tensor(4.3722e-35)       Mv Bdry Jump_loss:  tensor(1.7424e-25)  SurfaceTension_loss:  tensor(3.714
8)
Iteration: 41600        Total Loss: tensor(288.7541)
IC Loss:  tensor(2.2493e-07)   BC Loss:  tensor(4.8128e-07)   NS PDE Loss:  tensor(96.0205)   NS Div Free
Loss:  tensor(4.0863e-38)       Mv Bdry Jump_loss:  tensor(2.8006e-23)  SurfaceTension_loss:  tensor(3.404
8)
Iteration: 41800        Total Loss: tensor(271.7013)
IC Loss:  tensor(7.5586e-09)   BC Loss:  tensor(9.8432e-09)   NS PDE Loss:  tensor(96.0173)   NS Div Free
Loss:  tensor(2.0878e-40)       Mv Bdry Jump_loss:  tensor(2.0777e-26)  SurfaceTension_loss:  tensor(3.498
6)
Iteration: 42000        Total Loss: tensor(25810.1172)
IC Loss:  tensor(3.9328e-06)   BC Loss:  tensor(1.5701e-05)   NS PDE Loss:  tensor(95.8842)   NS Div Free
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Loss: tensor(4.4021e-39)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(506.4192)
Iteration: 42200   Total Loss: tensor(2.7511e+12)
IC Loss: tensor(0.1387)   BC Loss: tensor(7.0195e-06)   NS PDE Loss: tensor(76.9853)   NS Div Free
Loss: tensor(7.8969e-38)   Mv Bdry Jump_loss: tensor(3.2517e-23) SurfaceTension_loss: tensor(5.5022
e+10)
Iteration: 42400   Total Loss: tensor(4.6938e+08)
IC Loss: tensor(1.9419)   BC Loss: tensor(8.1142e-06)   NS PDE Loss: tensor(88.0018)   NS Div Free
Loss: tensor(2.3918e-32)   Mv Bdry Jump_loss: tensor(1.5124e-18) SurfaceTension_loss: tensor(550368
6.)
Iteration: 42600   Total Loss: tensor(16780960.)
IC Loss: tensor(0.1678)   BC Loss: tensor(6.6971e-06)   NS PDE Loss: tensor(95.9767)   NS Div Free
Loss: tensor(2.5077e-39)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(87.9347)
Iteration: 42800   Total Loss: tensor(17474822.)
IC Loss: tensor(0.1747)   BC Loss: tensor(2.0336e-06)   NS PDE Loss: tensor(95.9603)   NS Div Free
Loss: tensor(8.4455e-37)   Mv Bdry Jump_loss: tensor(3.3029e-28) SurfaceTension_loss: tensor(140.11
84)
Iteration: 43000   Total Loss: tensor(12649193.)
IC Loss: tensor(0.1265)   BC Loss: tensor(1.2715e-07)   NS PDE Loss: tensor(95.9414)   NS Div Free
Loss: tensor(7.4353e-38)   Mv Bdry Jump_loss: tensor(4.6943e-28) SurfaceTension_loss: tensor(76.831
4)
Iteration: 43200   Total Loss: tensor(9434333.)
IC Loss: tensor(0.0943)   BC Loss: tensor(1.9760e-08)   NS PDE Loss: tensor(95.9921)   NS Div Free
Loss: tensor(1.2242e-36)   Mv Bdry Jump_loss: tensor(1.2584e-28) SurfaceTension_loss: tensor(30.498
7)
Iteration: 43400   Total Loss: tensor(843191.1250)
IC Loss: tensor(0.0083)   BC Loss: tensor(3.9767e-12)   NS PDE Loss: tensor(95.9290)   NS Div Free
Loss: tensor(2.3910e-37)   Mv Bdry Jump_loss: tensor(2.0009e-28) SurfaceTension_loss: tensor(171.27
47)
Iteration: 43600   Total Loss: tensor(239061.9688)
IC Loss: tensor(0.0023)   BC Loss: tensor(1.5939e-18)   NS PDE Loss: tensor(95.9238)   NS Div Free
Loss: tensor(5.3220e-36)   Mv Bdry Jump_loss: tensor(2.5080e-28) SurfaceTension_loss: tensor(129.18
72)
Iteration: 43800   Total Loss: tensor(105527.5625)
IC Loss: tensor(0.0010)   BC Loss: tensor(1.5854e-18)   NS PDE Loss: tensor(95.9491)   NS Div Free
Loss: tensor(2.8941e-36)   Mv Bdry Jump_loss: tensor(1.7186e-28) SurfaceTension_loss: tensor(83.903
8)
Iteration: 44000   Total Loss: tensor(29214.2832)
IC Loss: tensor(0.0003)   BC Loss: tensor(1.5854e-18)   NS PDE Loss: tensor(95.9536)   NS Div Free
Loss: tensor(8.4176e-37)   Mv Bdry Jump_loss: tensor(2.0084e-28) SurfaceTension_loss: tensor(67.246
9)
Iteration: 44200   Total Loss: tensor(6.8250e+08)
IC Loss: tensor(2.6967)   BC Loss: tensor(1.5854e-18)   NS PDE Loss: tensor(91.0479)   NS Div Free

Loss: tensor(1.3371e-33)   Mv Bdry Jump_loss: tensor(5.6579e-24) SurfaceTension_loss: tensor(825652
4.)
Iteration: 44400   Total Loss: tensor(757995.0625)
IC Loss: tensor(0.0074)   BC Loss: tensor(1.5854e-18)   NS PDE Loss: tensor(95.8856)   NS Div Free
Loss: tensor(4.8077e-36)   Mv Bdry Jump_loss: tensor(7.9498e-28) SurfaceTension_loss: tensor(326.28
97)
Iteration: 44600   Total Loss: tensor(45366.1523)
IC Loss: tensor(0.0002)   BC Loss: tensor(1.5854e-18)   NS PDE Loss: tensor(95.9036)   NS Div Free
Loss: tensor(3.0182e-36)   Mv Bdry Jump_loss: tensor(1.1547e-27) SurfaceTension_loss: tensor(406.24
27)
Iteration: 44800   Total Loss: tensor(36500.9180)
IC Loss: tensor(0.0002)   BC Loss: tensor(1.5854e-18)   NS PDE Loss: tensor(95.8608)   NS Div Free
Loss: tensor(3.0106e-36)   Mv Bdry Jump_loss: tensor(9.6590e-28) SurfaceTension_loss: tensor(288.68
59)
Iteration: 45000   Total Loss: tensor(14101.3770)
IC Loss: tensor(2.5512e-05)   BC Loss: tensor(1.9817e-18)   NS PDE Loss: tensor(95.9001)   NS Div Free
Loss: tensor(5.6448e-36)   Mv Bdry Jump_loss: tensor(1.2387e-27) SurfaceTension_loss: tensor(229.08
56)
Iteration: 45200   Total Loss: tensor(17128.5391)
IC Loss: tensor(8.2343e-05)   BC Loss: tensor(1.9817e-18)   NS PDE Loss: tensor(95.9259)   NS Div Free
Loss: tensor(9.2625e-37)   Mv Bdry Jump_loss: tensor(8.7275e-28) SurfaceTension_loss: tensor(175.96
59)
Iteration: 45400   Total Loss: tensor(2098.3330)
IC Loss: tensor(3.5844e-06)   BC Loss: tensor(1.9817e-18)   NS PDE Loss: tensor(95.9054)   NS Div Free
Loss: tensor(2.9665e-37)   Mv Bdry Jump_loss: tensor(5.1799e-28) SurfaceTension_loss: tensor(32.879
7)
Iteration: 45600   Total Loss: tensor(8735.6973)
IC Loss: tensor(1.6329e-05)   BC Loss: tensor(1.9765e-13)   NS PDE Loss: tensor(95.9352)   NS Div Free
Loss: tensor(1.8614e-37)   Mv Bdry Jump_loss: tensor(5.5415e-28) SurfaceTension_loss: tensor(140.13
63)
Iteration: 45800   Total Loss: tensor(6481.9702)
IC Loss: tensor(2.5608e-05)   BC Loss: tensor(4.5488e-11)   NS PDE Loss: tensor(95.9554)   NS Div Free
Loss: tensor(3.1697e-37)   Mv Bdry Jump_loss: tensor(7.7113e-28) SurfaceTension_loss: tensor(76.504
2)
Iteration: 46000   Total Loss: tensor(1525.9080)
IC Loss: tensor(1.6235e-06)   BC Loss: tensor(4.8093e-07)   NS PDE Loss: tensor(95.9388)   NS Div Free
Loss: tensor(7.5136e-34)   Mv Bdry Jump_loss: tensor(6.6737e-20) SurfaceTension_loss: tensor(25.352
3)
Iteration: 46200   Total Loss: tensor(3590.0251)
IC Loss: tensor(1.4755e-05)   BC Loss: tensor(5.5205e-05)   NS PDE Loss: tensor(95.9158)   NS Div Free
Loss: tensor(1.0359e-35)   Mv Bdry Jump_loss: tensor(1.9144e-20) SurfaceTension_loss: tensor(40.371
8)

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Iteration: 46400        Total Loss: tensor(1732.2310)
IC Loss:  tensor(7.0061e-06)    BC Loss:  tensor(2.3850e-05)    NS PDE Loss:  tensor(95.9484)   NS Div Free
Loss:  tensor(5.4904e-36)       Mv Bdry Jump_loss:  tensor(4.6023e-22)  SurfaceTension_loss:  tensor(18.713
5)
Iteration: 46600        Total Loss: tensor(1832.0226)
IC Loss:  tensor(4.1335e-06)    BC Loss:  tensor(3.1081e-10)    NS PDE Loss:  tensor(95.9171)   NS Div Free
Loss:  tensor(3.6689e-37)       Mv Bdry Jump_loss:  tensor(8.6116e-22)  SurfaceTension_loss:  tensor(26.455
2)
Iteration: 46800        Total Loss: tensor(1726.3334)
IC Loss:  tensor(6.9593e-07)    BC Loss:  tensor(1.5617e-08)    NS PDE Loss:  tensor(95.9032)   NS Div Free
Loss:  tensor(1.2046e-38)       Mv Bdry Jump_loss:  tensor(1.7167e-21)  SurfaceTension_loss:  tensor(31.216
7)
Iteration: 47000        Total Loss: tensor(509.6799)
IC Loss:  tensor(5.5877e-07)    BC Loss:  tensor(7.2878e-07)    NS PDE Loss:  tensor(95.9391)   NS Div Free
Loss:  tensor(5.3221e-37)       Mv Bdry Jump_loss:  tensor(4.0352e-22)  SurfaceTension_loss:  tensor(7.157
3)
Iteration: 47200        Total Loss: tensor(719.3911)
IC Loss:  tensor(2.0922e-06)    BC Loss:  tensor(3.3953e-06)    NS PDE Loss:  tensor(95.9609)   NS Div Free
Loss:  tensor(4.8500e-40)       Mv Bdry Jump_loss:  tensor(4.2729e-25)  SurfaceTension_loss:  tensor(8.284
1)
Iteration: 47400        Total Loss: tensor(3691.3579)
IC Loss:  tensor(1.6065e-06)    BC Loss:  tensor(4.8074e-09)    NS PDE Loss:  tensor(95.8495)   NS Div Free
Loss:  tensor(7.3497e-40)       Mv Bdry Jump_loss:  tensor(1.5078e-26)  SurfaceTension_loss:  tensor(68.697
1)
Iteration: 47600        Total Loss: tensor(1056.3876)
IC Loss:  tensor(4.8386e-07)    BC Loss:  tensor(9.6456e-08)    NS PDE Loss:  tensor(95.9541)   NS Div Free
Loss:  tensor(1.4447e-41)       Mv Bdry Jump_loss:  tensor(3.0883e-27)  SurfaceTension_loss:  tensor(18.241
0)
Iteration: 47800        Total Loss: tensor(4246.6362)
IC Loss:  tensor(1.2622e-06)    BC Loss:  tensor(4.5625e-08)    NS PDE Loss:  tensor(95.8948)   NS Div Free
Loss:  tensor(1.9490e-40)       Mv Bdry Jump_loss:  tensor(3.1305e-27)  SurfaceTension_loss:  tensor(80.490
5)
Iteration: 48000        Total Loss: tensor(844.9995)
IC Loss:  tensor(2.7325e-07)    BC Loss:  tensor(2.3919e-07)    NS PDE Loss:  tensor(95.9646)   NS Div Free
Loss:  tensor(1.3197e-41)       Mv Bdry Jump_loss:  tensor(1.8498e-27)  SurfaceTension_loss:  tensor(14.434
2)
Iteration: 48200        Total Loss: tensor(567.8564)
IC Loss:  tensor(1.7290e-07)    BC Loss:  tensor(5.8805e-08)    NS PDE Loss:  tensor(95.9439)   NS Div Free
Loss:  tensor(2.7793e-41)       Mv Bdry Jump_loss:  tensor(2.2395e-28)  SurfaceTension_loss:  tensor(9.092
4)
Iteration: 48400        Total Loss: tensor(1020.0142)
IC Loss:  tensor(3.1180e-06)    BC Loss:  tensor(1.2094e-05)    NS PDE Loss:  tensor(95.9677)   NS Div Free
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Loss: tensor(2.1181e-37)   Mv Bdry Jump_loss: tensor(1.0362e-22) SurfaceTension_loss: tensor(12.244
9)
Iteration: 48600   Total Loss: tensor(1864.0878)
IC Loss: tensor(3.5287e-07)   BC Loss: tensor(3.6174e-07)   NS PDE Loss: tensor(95.9436)   NS Div Free
Loss: tensor(2.9836e-40)   Mv Bdry Jump_loss: tensor(1.5402e-26) SurfaceTension_loss: tensor(34.657
2)
Iteration: 48800   Total Loss: tensor(413.7770)
IC Loss: tensor(2.2494e-07)   BC Loss: tensor(5.1876e-07)   NS PDE Loss: tensor(95.9287)   NS Div Free
Loss: tensor(9.9429e-41)   Mv Bdry Jump_loss: tensor(2.6084e-25) SurfaceTension_loss: tensor(5.907
1)
Iteration: 49000   Total Loss: tensor(527.7225)
IC Loss: tensor(3.3159e-07)   BC Loss: tensor(6.0579e-07)   NS PDE Loss: tensor(95.9314)   NS Div Free
Loss: tensor(6.9312e-37)   Mv Bdry Jump_loss: tensor(5.0827e-21) SurfaceTension_loss: tensor(7.972
6)
Iteration: 49200   Total Loss: tensor(721.4333)
IC Loss: tensor(1.2910e-07)   BC Loss: tensor(7.0648e-09)   NS PDE Loss: tensor(95.9594)   NS Div Free
Loss: tensor(1.0140e-39)   Mv Bdry Jump_loss: tensor(3.6543e-25) SurfaceTension_loss: tensor(12.251
3)
Iteration: 49400   Total Loss: tensor(260.7132)
IC Loss: tensor(1.2941e-07)   BC Loss: tensor(1.4434e-07)   NS PDE Loss: tensor(95.9681)   NS Div Free
Loss: tensor(2.3631e-37)   Mv Bdry Jump_loss: tensor(9.3404e-25) SurfaceTension_loss: tensor(3.036
1)
Iteration: 49600   Total Loss: tensor(708.5705)
IC Loss: tensor(1.1550e-06)   BC Loss: tensor(1.9827e-06)   NS PDE Loss: tensor(95.9473)   NS Div Free
Loss: tensor(5.3644e-33)   Mv Bdry Jump_loss: tensor(2.3442e-23) SurfaceTension_loss: tensor(9.942
5)
Iteration: 49800   Total Loss: tensor(367.7623)
IC Loss: tensor(1.7112e-07)   BC Loss: tensor(5.6086e-08)   NS PDE Loss: tensor(95.9516)   NS Div Free
Loss: tensor(1.0876e-39)   Mv Bdry Jump_loss: tensor(1.9084e-26) SurfaceTension_loss: tensor(5.094
0)
Iteration: 50000   Total Loss: tensor(674.8130)
IC Loss: tensor(2.5537e-07)   BC Loss: tensor(6.7983e-07)   NS PDE Loss: tensor(95.9742)   NS Div Free
Loss: tensor(1.4536e-35)   Mv Bdry Jump_loss: tensor(6.1131e-21) SurfaceTension_loss: tensor(11.066
0)
Current Final Time: 0.4 Current Learning Rate: 0.005
Iteration: 200 Total Loss: tensor(141.7777)
IC Loss: tensor(2.9591e-07)   BC Loss: tensor(5.2514e-07)   NS PDE Loss: tensor(95.9733)   NS Div Free
Loss: tensor(5.8443e-35)   Mv Bdry Jump_loss: tensor(2.5621e-23) SurfaceTension_loss: tensor(0.324
3)
Iteration: 400 Total Loss: tensor(365.0789)
IC Loss: tensor(2.5590e-06)   BC Loss: tensor(5.9233e-06)   NS PDE Loss: tensor(95.9752)   NS Div Free
Loss: tensor(5.3045e-37)   Mv Bdry Jump_loss: tensor(9.9411e-28) SurfaceTension_loss: tensor(0.264

1)
Iteration: 600 Total Loss: tensor(135.7576)
IC Loss: tensor(2.9072e-07)   BC Loss: tensor(1.0232e-06)   NS PDE Loss: tensor(95.9862)   NS Div Free
Loss: tensor(1.0053e-39)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.2140)
Iteration: 800 Total Loss: tensor(285.5800)
IC Loss: tensor(1.8578e-06)   BC Loss: tensor(7.0224e-06)   NS PDE Loss: tensor(95.9924)   NS Div Free
Loss: tensor(1.0827e-40)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.0762)
Iteration: 1000   Total Loss: tensor(114.3900)
IC Loss: tensor(1.4761e-07)   BC Loss: tensor(5.3410e-07)   NS PDE Loss: tensor(95.9830)   NS Div Free
Loss: tensor(1.7490e-40)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.0729)
Iteration: 1200   Total Loss: tensor(3.0163e+09)
IC Loss: tensor(5.0680)   BC Loss: tensor(4.3155e-06)   NS PDE Loss: tensor(74.1080)   NS Div Free
Loss: tensor(1.3759e-34)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(50190824.)
Iteration: 1400   Total Loss: tensor(4.2757e+11)
IC Loss: tensor(2.8685)   BC Loss: tensor(4.2777e-06)   NS PDE Loss: tensor(86.5935)   NS Div Free
Loss: tensor(1.2870e-35)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(8.5458e+09)
Iteration: 1600   Total Loss: tensor(2.3559e+09)
IC Loss: tensor(6.3729)   BC Loss: tensor(4.2178e-06)   NS PDE Loss: tensor(92.5368)   NS Div Free
Loss: tensor(5.7588e-37)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(34372896.)
Iteration: 1800   Total Loss: tensor(1.4306e+10)
IC Loss: tensor(7.4714)   BC Loss: tensor(4.2130e-06)   NS PDE Loss: tensor(54.3908)   NS Div Free
Loss: tensor(1.1188e-34)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(2.7117e+08)
Iteration: 2000   Total Loss: tensor(1.3740e+09)
IC Loss: tensor(13.7340)   BC Loss: tensor(3.6896e-06)   NS PDE Loss: tensor(95.6978)   NS Div Free
Loss: tensor(1.8470e-38)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(12373.5742)
Iteration: 2200   Total Loss: tensor(6.6325e+08)
IC Loss: tensor(6.6306)   BC Loss: tensor(3.2078e-06)   NS PDE Loss: tensor(95.6013)   NS Div Free
Loss: tensor(5.1275e-39)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(3745.4058)
Iteration: 2400   Total Loss: tensor(4.1496e+08)
IC Loss: tensor(3.7137)   BC Loss: tensor(3.1288e-06)   NS PDE Loss: tensor(90.6729)   NS Div Free
Loss: tensor(9.2011e-36)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(871761.7500)
Iteration: 2600   Total Loss: tensor(4.5283e+09)
IC Loss: tensor(3.1266)   BC Loss: tensor(2.9893e-06)   NS PDE Loss: tensor(92.6817)   NS Div Free
Loss: tensor(7.4777e-36)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(84313312.)
Iteration: 2800   Total Loss: tensor(5.7390e+08)
IC Loss: tensor(3.3234)   BC Loss: tensor(2.9344e-06)   NS PDE Loss: tensor(94.1887)   NS Div Free
Loss: tensor(2.8198e-37)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(4831188.)
Iteration: 3000   Total Loss: tensor(1.1857e+08)
IC Loss: tensor(1.0055)   BC Loss: tensor(1.2526e-06)   NS PDE Loss: tensor(95.6488)   NS Div Free
Loss: tensor(3.5409e-37)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(360365.8750)
Iteration: 3200   Total Loss: tensor(1.0018e+08)
IC Loss: tensor(1.0001)   BC Loss: tensor(5.0612e-12)   NS PDE Loss: tensor(95.6712)   NS Div Free

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Loss:  tensor(6.6789e-38)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(3225.0139)
Iteration: 3400      Total Loss: tensor(1.7599e+12)
IC Loss:  tensor(1.9182)      BC Loss:  tensor(6.1953e-15)    NS PDE Loss:  tensor(10.6902)   NS Div Free
Loss:  tensor(2.1538e-33)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(3.5194e+10)
Iteration: 3600      Total Loss: tensor(3.5275e+09)
IC Loss:  tensor(3.6085)      BC Loss:  tensor(5.7586e-15)    NS PDE Loss:  tensor(92.2709)   NS Div Free
Loss:  tensor(3.0319e-36)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(63332592.)
Iteration: 3800      Total Loss: tensor(1.1856e+11)
IC Loss:  tensor(5.1215)      BC Loss:  tensor(5.5921e-15)    NS PDE Loss:  tensor(82.2297)   NS Div Free
Loss:  tensor(2.0952e-35)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(2.3609e+09)
Iteration: 4000      Total Loss: tensor(90301512.)
IC Loss:  tensor(0.9024)      BC Loss:  tensor(3.1494e-15)    NS PDE Loss:  tensor(95.7027)   NS Div Free
Loss:  tensor(1.6295e-38)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1184.9110)
Iteration: 4200      Total Loss: tensor(1.0150e+08)
IC Loss:  tensor(1.0049)      BC Loss:  tensor(3.6068e-17)    NS PDE Loss:  tensor(94.9955)   NS Div Free
Loss:  tensor(5.1783e-37)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(20270.7148)
Iteration: 4400      Total Loss: tensor(10069859.)
IC Loss:  tensor(0.1007)      BC Loss:  tensor(6.9404e-18)    NS PDE Loss:  tensor(95.9183)   NS Div Free
Loss:  tensor(2.0016e-40)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(94.7735)
Iteration: 4600      Total Loss: tensor(11835.4395)
IC Loss:  tensor(3.6284e-05)  BC Loss:  tensor(8.4644e-29)    NS PDE Loss:  tensor(95.8687)   NS Div Free
Loss:  tensor(6.1436e-39)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(162.2230)
Iteration: 4800      Total Loss: tensor(1018.6031)
IC Loss:  tensor(1.7977e-06)  BC Loss:  tensor(9.8918e-29)    NS PDE Loss:  tensor(95.9619)   NS Div Free
Loss:  tensor(1.5616e-39)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(14.8575)
Iteration: 5000      Total Loss: tensor(16343.7617)
IC Loss:  tensor(1.9693e-05)  BC Loss:  tensor(1.0793e-28)    NS PDE Loss:  tensor(95.8871)   NS Div Free
Loss:  tensor(7.8628e-39)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(285.5723)
Iteration: 5200      Total Loss: tensor(1.3306e+08)
IC Loss:  tensor(0.4305)      BC Loss:  tensor(1.1086e-28)    NS PDE Loss:  tensor(83.6485)   NS Div Free
Loss:  tensor(3.4619e-35)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1800300.2500)
Iteration: 5400      Total Loss: tensor(23908058.)
IC Loss:  tensor(0.2308)      BC Loss:  tensor(1.0483e-28)    NS PDE Loss:  tensor(95.2372)   NS Div Free
Loss:  tensor(3.3929e-37)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(16471.2500)
Iteration: 5600      Total Loss: tensor(285401.8750)
IC Loss:  tensor(4.4738e-06)  BC Loss:  tensor(1.0468e-28)    NS PDE Loss:  tensor(95.9450)   NS Div Free
Loss:  tensor(2.2667e-39)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(5697.1714)
Iteration: 5800      Total Loss: tensor(3142.1663)
IC Loss:  tensor(1.8570e-06)  BC Loss:  tensor(1.0233e-28)    NS PDE Loss:  tensor(95.9284)   NS Div Free
Loss:  tensor(2.6632e-39)    Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(57.2107)
Iteration: 6000      Total Loss: tensor(584.9168)
IC Loss:  tensor(4.7693e-07)  BC Loss:  tensor(1.1500e-28)    NS PDE Loss:  tensor(95.9711)   NS Div Free
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Loss:  tensor(1.3006e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(8.8251)
Iteration: 6200     Total Loss: tensor(691.5095)
IC Loss:  tensor(4.5305e-07)   BC Loss:  tensor(1.2275e-28)   NS PDE Loss:  tensor(95.9637)   NS Div Free
Loss:  tensor(1.3820e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(11.0048)
Iteration: 6400     Total Loss: tensor(2243.3096)
IC Loss:  tensor(4.4328e-06)   BC Loss:  tensor(1.1946e-28)   NS PDE Loss:  tensor(95.9423)   NS Div Free
Loss:  tensor(2.6029e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(34.0817)
Iteration: 6600     Total Loss: tensor(8079.1172)
IC Loss:  tensor(4.7586e-07)   BC Loss:  tensor(1.2443e-28)   NS PDE Loss:  tensor(95.8532)   NS Div Free
Loss:  tensor(1.6193e-38)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(158.7136)
Iteration: 6800     Total Loss: tensor(426.6639)
IC Loss:  tensor(5.6830e-08)   BC Loss:  tensor(1.1013e-28)   NS PDE Loss:  tensor(95.9812)   NS Div Free
Loss:  tensor(2.7552e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(6.5000)
Iteration: 7000     Total Loss: tensor(501.5745)
IC Loss:  tensor(1.5926e-07)   BC Loss:  tensor(1.2279e-28)   NS PDE Loss:  tensor(95.9870)   NS Div Free
Loss:  tensor(1.1528e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(7.7932)
Iteration: 7200     Total Loss: tensor(1602.9952)
IC Loss:  tensor(1.4526e-07)   BC Loss:  tensor(1.3417e-28)   NS PDE Loss:  tensor(95.9709)   NS Div Free
Loss:  tensor(1.1642e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(29.8500)
Iteration: 7400     Total Loss: tensor(12058.3369)
IC Loss:  tensor(4.2290e-07)   BC Loss:  tensor(1.4241e-28)   NS PDE Loss:  tensor(95.8991)   NS Div Free
Loss:  tensor(4.8126e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(238.4030)
Iteration: 7600     Total Loss: tensor(494.1458)
IC Loss:  tensor(1.6041e-07)   BC Loss:  tensor(1.5542e-28)   NS PDE Loss:  tensor(95.9865)   NS Div Free
Loss:  tensor(7.5037e-40)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(7.6424)
Iteration: 7800     Total Loss: tensor(10001033.)
IC Loss:  tensor(0.1000)       BC Loss:  tensor(1.5356e-28)   NS PDE Loss:  tensor(95.9814)   NS Div Free
Loss:  tensor(1.0472e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(18.5197)
Iteration: 8000     Total Loss: tensor(2390.2244)
IC Loss:  tensor(3.9681e-07)   BC Loss:  tensor(1.5522e-28)   NS PDE Loss:  tensor(95.9237)   NS Div Free
Loss:  tensor(2.9840e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(45.0924)
Iteration: 8200     Total Loss: tensor(1667.3257)
IC Loss:  tensor(7.3985e-07)   BC Loss:  tensor(1.5968e-28)   NS PDE Loss:  tensor(95.9638)   NS Div Free
Loss:  tensor(1.0088e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(29.9475)
Iteration: 8400     Total Loss: tensor(2658.9900)
IC Loss:  tensor(1.8206e-06)   BC Loss:  tensor(1.6628e-28)   NS PDE Loss:  tensor(95.9216)   NS Div Free
Loss:  tensor(2.4161e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(47.6201)
Iteration: 8600     Total Loss: tensor(40014640.)
IC Loss:  tensor(0.4000)       BC Loss:  tensor(1.4967e-28)   NS PDE Loss:  tensor(95.9176)   NS Div Free
Loss:  tensor(2.9604e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(290.0283)
Iteration: 8800     Total Loss: tensor(10000840.)
IC Loss:  tensor(0.1000)       BC Loss:  tensor(1.4317e-28)   NS PDE Loss:  tensor(95.9886)   NS Div Free
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Loss:  tensor(4.1740e-40)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(14.4357)
Iteration: 9000        Total Loss: tensor(580.6342)
IC Loss:  tensor(9.4695e-07)    BC Loss:  tensor(1.5047e-28)    NS PDE Loss:  tensor(95.9858)   NS Div Free
Loss:  tensor(3.9826e-40)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(7.7991)
Iteration: 9200        Total Loss: tensor(673.8420)
IC Loss:  tensor(3.0943e-07)    BC Loss:  tensor(1.5396e-28)    NS PDE Loss:  tensor(95.9850)   NS Div Free
Loss:  tensor(4.2091e-40)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(10.9383)
Iteration: 9400        Total Loss: tensor(2059.1960)
IC Loss:  tensor(2.5013e-06)    BC Loss:  tensor(1.5470e-28)    NS PDE Loss:  tensor(95.9664)   NS Div Free
Loss:  tensor(8.9812e-40)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(34.2620)
Iteration: 9600        Total Loss: tensor(1343.2932)
IC Loss:  tensor(3.7548e-06)    BC Loss:  tensor(1.4245e-28)    NS PDE Loss:  tensor(95.9540)   NS Div Free
Loss:  tensor(9.3104e-38)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(17.4372)
Iteration: 9800        Total Loss: tensor(40000864.)
IC Loss:  tensor(0.4000)        BC Loss:  tensor(1.3993e-28)    NS PDE Loss:  tensor(95.9092)   NS Div Free
Loss:  tensor(2.7830e-39)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(9.6397)
Iteration: 10000        Total Loss: tensor(10000511.)
IC Loss:  tensor(0.1000)        BC Loss:  tensor(4.0294e-31)    NS PDE Loss:  tensor(95.9520)   NS Div Free
Loss:  tensor(2.8533e-39)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(7.5189)
Iteration: 10200        Total Loss: tensor(4.1743e+08)
IC Loss:  tensor(1.2142)        BC Loss:  tensor(1.4438e-28)    NS PDE Loss:  tensor(83.0102)   NS Div Free
Loss:  tensor(5.3260e-35)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(5920194.5000)
Iteration: 10400        Total Loss: tensor(9.8322e+08)
IC Loss:  tensor(1.7247)        BC Loss:  tensor(1.4531e-28)    NS PDE Loss:  tensor(88.7698)   NS Div Free
Loss:  tensor(2.3526e-35)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(16214895.)
Iteration: 10600        Total Loss: tensor(23384930.)
IC Loss:  tensor(0.2336)        BC Loss:  tensor(1.5733e-28)    NS PDE Loss:  tensor(95.9328)   NS Div Free
Loss:  tensor(1.1187e-37)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(588.8773)
Iteration: 10800        Total Loss: tensor(16915188.)
IC Loss:  tensor(0.1691)        BC Loss:  tensor(1.5060e-28)    NS PDE Loss:  tensor(95.9307)   NS Div Free
Loss:  tensor(4.9652e-39)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(200.1143)
Iteration: 11000        Total Loss: tensor(1097058.7500)
IC Loss:  tensor(0.0100)        BC Loss:  tensor(4.2750e-31)    NS PDE Loss:  tensor(95.7579)   NS Div Free
Loss:  tensor(1.3980e-37)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1904.1586)
Iteration: 11200        Total Loss: tensor(53270.7773)
IC Loss:  tensor(3.9461e-06)    BC Loss:  tensor(1.3046e-28)    NS PDE Loss:  tensor(95.7818)   NS Div Free
Loss:  tensor(2.0922e-38)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1055.6077)
Iteration: 11400        Total Loss: tensor(13268.1465)
IC Loss:  tensor(3.9486e-05)    BC Loss:  tensor(1.2345e-28)    NS PDE Loss:  tensor(95.8963)   NS Div Free
Loss:  tensor(2.1158e-39)       Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(184.4724)
Iteration: 11600        Total Loss: tensor(547.4464)
IC Loss:  tensor(5.5230e-07)    BC Loss:  tensor(1.1563e-28)    NS PDE Loss:  tensor(95.9444)   NS Div Free
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Loss:  tensor(1.0315e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(7.9254)
Iteration: 11800      Total Loss: tensor(454.7750)
IC Loss:  tensor(4.6818e-07)    BC Loss:  tensor(1.0488e-28)    NS PDE Loss:  tensor(95.9471)   NS Div Free
Loss:  tensor(9.6312e-40)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(6.2402)
Iteration: 12000      Total Loss: tensor(294.4613)
IC Loss:  tensor(1.8538e-07)    BC Loss:  tensor(1.0023e-28)    NS PDE Loss:  tensor(95.9501)   NS Div Free
Loss:  tensor(8.3337e-40)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(3.5995)
Iteration: 12200      Total Loss: tensor(401.1793)
IC Loss:  tensor(1.5672e-07)    BC Loss:  tensor(9.6186e-29)    NS PDE Loss:  tensor(95.9536)   NS Div Free
Loss:  tensor(9.7206e-40)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(5.7911)
Iteration: 12400      Total Loss: tensor(371.3340)
IC Loss:  tensor(3.3256e-07)    BC Loss:  tensor(9.1862e-29)    NS PDE Loss:  tensor(95.9556)   NS Div Free
Loss:  tensor(9.2533e-40)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(4.8424)
Iteration: 12600      Total Loss: tensor(445.8860)
IC Loss:  tensor(3.7053e-07)    BC Loss:  tensor(2.5378e-31)    NS PDE Loss:  tensor(95.9498)   NS Div Free
Loss:  tensor(1.6935e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(6.2577)
Iteration: 12800      Total Loss: tensor(344.3385)
IC Loss:  tensor(1.6267e-07)    BC Loss:  tensor(3.3044e-31)    NS PDE Loss:  tensor(95.9378)   NS Div Free
Loss:  tensor(4.8557e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(4.6427)
Iteration: 13000      Total Loss: tensor(648.3261)
IC Loss:  tensor(1.4322e-06)    BC Loss:  tensor(3.1338e-31)    NS PDE Loss:  tensor(95.9630)   NS Div Free
Loss:  tensor(9.9466e-40)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(8.1830)
Iteration: 13200      Total Loss: tensor(419.8385)
IC Loss:  tensor(5.2004e-07)    BC Loss:  tensor(2.3355e-31)    NS PDE Loss:  tensor(95.9673)   NS Div Free
Loss:  tensor(1.0929e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(5.4373)
Iteration: 13400      Total Loss: tensor(1986.6648)
IC Loss:  tensor(4.2546e-06)    BC Loss:  tensor(2.4358e-31)    NS PDE Loss:  tensor(95.9082)   NS Div Free
Loss:  tensor(6.5742e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(29.3060)
Iteration: 13600      Total Loss: tensor(185176.8906)
IC Loss:  tensor(5.6168e-05)    BC Loss:  tensor(2.6796e-31)    NS PDE Loss:  tensor(95.8635)   NS Div Free
Loss:  tensor(4.1015e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(3589.2837)
Iteration: 13800      Total Loss: tensor(4188609.7500)
IC Loss:  tensor(0.0413)      BC Loss:  tensor(2.2460e-31)    NS PDE Loss:  tensor(93.0618)   NS Div Free
Loss:  tensor(2.2464e-36)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1155.6947)
Iteration: 14000      Total Loss: tensor(8043.8408)
IC Loss:  tensor(7.8907e-05)    BC Loss:  tensor(2.3486e-31)    NS PDE Loss:  tensor(62.9691)   NS Div Free
Loss:  tensor(3.3873e-34)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1.8027)
Iteration: 14200      Total Loss: tensor(96.1104)
IC Loss:  tensor(1.5497e-09)    BC Loss:  tensor(1.8400e-24)    NS PDE Loss:  tensor(95.9554)   NS Div Free
Loss:  tensor(9.4329e-40)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(4.9300e-08)
Iteration: 14400      Total Loss: tensor(2.9110e+08)
IC Loss:  tensor(2.2695e-08)    BC Loss:  tensor(1.7805e-24)    NS PDE Loss:  tensor(48.3909)   NS Div Free
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Loss:  tensor(5.7021e-34)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(5821981.)
Iteration: 14600      Total Loss: tensor(3.4809e+10)
IC Loss:  tensor(0.7070)       BC Loss:  tensor(1.7316e-24)    NS PDE Loss:  tensor(25.2837)   NS Div Free
Loss:  tensor(5.8663e-34)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(6.9476e+08)
Iteration: 14800      Total Loss: tensor(5.5422e+13)
IC Loss:  tensor(2.5062)       BC Loss:  tensor(1.6889e-24)    NS PDE Loss:  tensor(29.1936)   NS Div Free
Loss:  tensor(4.7212e-34)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1.1084e+12)
Iteration: 15000      Total Loss: tensor(5.0599e+08)
IC Loss:  tensor(2.5470)       BC Loss:  tensor(1.6715e-24)    NS PDE Loss:  tensor(90.7380)   NS Div Free
Loss:  tensor(1.8032e-36)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(5025875.)
Iteration: 15200      Total Loss: tensor(4.1087e+08)
IC Loss:  tensor(3.9385)       BC Loss:  tensor(1.6835e-24)    NS PDE Loss:  tensor(87.6288)   NS Div Free
Loss:  tensor(8.7153e-36)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(340445.8125)
Iteration: 15400      Total Loss: tensor(7747654.5000)
IC Loss:  tensor(0.0775)       BC Loss:  tensor(1.6473e-24)    NS PDE Loss:  tensor(95.8406)   NS Div Free
Loss:  tensor(2.1085e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.0015)
Iteration: 15600      Total Loss: tensor(8005183.5000)
IC Loss:  tensor(0.0801)       BC Loss:  tensor(2.7040e-23)    NS PDE Loss:  tensor(95.8846)   NS Div Free
Loss:  tensor(1.7181e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.4558)
Iteration: 15800      Total Loss: tensor(7411186.5000)
IC Loss:  tensor(0.0149)       BC Loss:  tensor(2.8624e-23)    NS PDE Loss:  tensor(77.3511)   NS Div Free
Loss:  tensor(3.5235e-35)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(118399.0078)
Iteration: 16000      Total Loss: tensor(5133247.5000)
IC Loss:  tensor(0.0110)       BC Loss:  tensor(1.6726e-24)    NS PDE Loss:  tensor(92.8494)   NS Div Free
Loss:  tensor(4.7116e-37)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(80664.0781)
Iteration: 16200      Total Loss: tensor(101.4786)
IC Loss:  tensor(5.9043e-08)   BC Loss:  tensor(2.6792e-23)    NS PDE Loss:  tensor(95.5743)   NS Div Free
Loss:  tensor(6.8511e-37)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(2.7232e-08)
Iteration: 16400      Total Loss: tensor(108.2376)
IC Loss:  tensor(1.2125e-07)   BC Loss:  tensor(2.3794e-23)    NS PDE Loss:  tensor(95.9728)   NS Div Free
Loss:  tensor(6.5719e-41)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.0028)
Iteration: 16600      Total Loss: tensor(3950008.2500)
IC Loss:  tensor(0.0395)       BC Loss:  tensor(2.4722e-23)    NS PDE Loss:  tensor(95.9318)   NS Div Free
Loss:  tensor(6.9494e-39)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.1933)
Iteration: 16800      Total Loss: tensor(1662955.7500)
IC Loss:  tensor(0.0134)       BC Loss:  tensor(2.3948e-23)    NS PDE Loss:  tensor(93.5056)   NS Div Free
Loss:  tensor(1.4581e-36)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(6537.8887)
Iteration: 17000      Total Loss: tensor(1.1297e+09)
IC Loss:  tensor(6.8890e-06)   BC Loss:  tensor(5.5478e-30)    NS PDE Loss:  tensor(89.5923)   NS Div Free
Loss:  tensor(1.4383e-35)      Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(22593520.)
Iteration: 17200      Total Loss: tensor(36021060.)
IC Loss:  tensor(0.0121)       BC Loss:  tensor(2.4712e-23)    NS PDE Loss:  tensor(93.4608)   NS Div Free
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Loss:  tensor(1.1577e-37)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(696304.0625)
Iteration: 17400      Total Loss: tensor(174.1693)
IC Loss:  tensor(7.0223e-07)   BC Loss:  tensor(5.4289e-30)   NS PDE Loss:  tensor(94.6921)   NS Div Free
Loss:  tensor(1.0256e-38)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.1851)
Iteration: 17600      Total Loss: tensor(1.5707e+09)
IC Loss:  tensor(0.3833)       BC Loss:  tensor(5.5567e-30)   NS PDE Loss:  tensor(22.4365)   NS Div Free
Loss:  tensor(1.3711e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(30646972.)
Iteration: 17800      Total Loss: tensor(3588.2351)
IC Loss:  tensor(2.6772e-05)   BC Loss:  tensor(1.8005e-31)   NS PDE Loss:  tensor(94.8630)   NS Div Free
Loss:  tensor(2.1048e-37)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(16.3234)
Iteration: 18000      Total Loss: tensor(97.6526)
IC Loss:  tensor(1.8027e-08)   BC Loss:  tensor(1.3215e-24)   NS PDE Loss:  tensor(95.8499)   NS Div Free
Loss:  tensor(4.7694e-38)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(6.2343e-10)
Iteration: 18200      Total Loss: tensor(2.6768e+11)
IC Loss:  tensor(3.7164e-08)   BC Loss:  tensor(1.8728e-31)   NS PDE Loss:  tensor(20.4272)   NS Div Free
Loss:  tensor(1.1352e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(5.3535e+09)
Iteration: 18400      Total Loss: tensor(196.0437)
IC Loss:  tensor(1.0267e-06)   BC Loss:  tensor(5.4863e-24)   NS PDE Loss:  tensor(91.9571)   NS Div Free
Loss:  tensor(7.7962e-37)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.0284)
Iteration: 18600      Total Loss: tensor(2.0500e+08)
IC Loss:  tensor(0.2000)       BC Loss:  tensor(4.1295e-30)   NS PDE Loss:  tensor(84.0530)   NS Div Free
Loss:  tensor(3.7372e-35)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(3699981.5000)
Iteration: 18800      Total Loss: tensor(1858.7988)
IC Loss:  tensor(1.7711e-05)   BC Loss:  tensor(7.7584e-23)   NS PDE Loss:  tensor(87.7180)   NS Div Free
Loss:  tensor(1.3784e-35)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 19000      Total Loss: tensor(188.6679)
IC Loss:  tensor(9.7432e-07)   BC Loss:  tensor(1.1938e-24)   NS PDE Loss:  tensor(91.2354)   NS Div Free
Loss:  tensor(6.1628e-37)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(9.3283e-08)
Iteration: 19200      Total Loss: tensor(2.0499e+09)
IC Loss:  tensor(0.2016)       BC Loss:  tensor(1.5562e-31)   NS PDE Loss:  tensor(70.1155)   NS Div Free
Loss:  tensor(2.6333e-35)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(40594260.)
Iteration: 19400      Total Loss: tensor(4.2334e+08)
IC Loss:  tensor(2.9202)       BC Loss:  tensor(1.0789e-24)   NS PDE Loss:  tensor(79.2457)   NS Div Free
Loss:  tensor(4.7809e-35)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(2626482.2500)
Iteration: 19600      Total Loss: tensor(7988.8555)
IC Loss:  tensor(7.8925e-05)   BC Loss:  tensor(1.0767e-24)   NS PDE Loss:  tensor(95.7221)   NS Div Free
Loss:  tensor(1.7521e-37)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.0121)
Iteration: 19800      Total Loss: tensor(1349343.2500)
IC Loss:  tensor(0.0135)       BC Loss:  tensor(1.0156e-24)   NS PDE Loss:  tensor(95.8914)   NS Div Free
Loss:  tensor(6.7376e-41)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.0433)
Iteration: 20000      Total Loss: tensor(13550103.)
IC Loss:  tensor(0.0947)       BC Loss:  tensor(1.4519e-31)   NS PDE Loss:  tensor(93.1385)   NS Div Free
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Loss:  tensor(6.7858e-36)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(81601.7891)
Iteration: 20200     Total Loss: tensor(1.5408e+08)
IC Loss:  tensor(1.1400)      BC Loss:  tensor(3.7764e-30)    NS PDE Loss:  tensor(92.9536)   NS Div Free
Loss:  tensor(5.5528e-36)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(801473.3750)
Iteration: 20400     Total Loss: tensor(6.0848e+11)
IC Loss:  tensor(0.3475)      BC Loss:  tensor(1.0949e-23)    NS PDE Loss:  tensor(71.4207)   NS Div Free
Loss:  tensor(4.0728e-36)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(1.2169e+10)
Iteration: 20600     Total Loss: tensor(54.0463)
IC Loss:  tensor(9.7010e-10)  BC Loss:  tensor(2.8480e-30)    NS PDE Loss:  tensor(53.2594)   NS Div Free
Loss:  tensor(7.0112e-35)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(0.0138)
Iteration: 20800     Total Loss: tensor(2.0451e+08)
IC Loss:  tensor(0.4182)      BC Loss:  tensor(1.2108e-23)    NS PDE Loss:  tensor(81.8366)   NS Div Free
Loss:  tensor(2.8670e-34)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(3253739.7500)
Iteration: 21000     Total Loss: tensor(3.7587e+08)
IC Loss:  tensor(3.0509)      BC Loss:  tensor(1.0464e-23)    NS PDE Loss:  tensor(91.0897)   NS Div Free
Loss:  tensor(7.9009e-37)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(1415533.6250)
Iteration: 21200     Total Loss: tensor(6210.0605)
IC Loss:  tensor(6.1154e-05)  BC Loss:  tensor(1.0486e-23)    NS PDE Loss:  tensor(94.6644)   NS Div Free
Loss:  tensor(1.2756e-35)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(0.0003)
Iteration: 21400     Total Loss: tensor(1.8005e+08)
IC Loss:  tensor(0.0423)      BC Loss:  tensor(9.8383e-24)    NS PDE Loss:  tensor(94.0916)   NS Div Free
Loss:  tensor(5.1603e-37)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(3516503.2500)
Iteration: 21600     Total Loss: tensor(1.0841e+08)
IC Loss:  tensor(0.1022)      BC Loss:  tensor(9.7730e-24)    NS PDE Loss:  tensor(81.3961)   NS Div Free
Loss:  tensor(3.4938e-35)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(1963748.7500)
Iteration: 21800     Total Loss: tensor(8.1268e+10)
IC Loss:  tensor(0.1066)      BC Loss:  tensor(2.3143e-30)    NS PDE Loss:  tensor(82.7803)   NS Div Free
Loss:  tensor(1.1769e-35)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(1.6251e+09)
Iteration: 22000     Total Loss: tensor(2.8288e+10)
IC Loss:  tensor(1.1412)      BC Loss:  tensor(1.1681e-23)    NS PDE Loss:  tensor(73.5457)   NS Div Free
Loss:  tensor(2.9999e-34)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(5.6348e+08)
Iteration: 22200     Total Loss: tensor(3.3674e+08)
IC Loss:  tensor(1.4335)      BC Loss:  tensor(4.7863e-23)    NS PDE Loss:  tensor(93.9230)   NS Div Free
Loss:  tensor(3.4624e-36)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(3867777.)
Iteration: 22400     Total Loss: tensor(1.2971e+08)
IC Loss:  tensor(1.2329)      BC Loss:  tensor(4.8605e-23)    NS PDE Loss:  tensor(95.2469)   NS Div Free
Loss:  tensor(2.9645e-37)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(128459.2969)
Iteration: 22600     Total Loss: tensor(1.8604e+08)
IC Loss:  tensor(0.8617)      BC Loss:  tensor(3.2705e-30)    NS PDE Loss:  tensor(94.9535)   NS Div Free
Loss:  tensor(1.3506e-36)     Mv Bdry Jump_loss:  tensor(0.)  SurfaceTension_loss:  tensor(1997467.7500)
Iteration: 22800     Total Loss: tensor(181950.9375)
IC Loss:  tensor(0.0016)      BC Loss:  tensor(2.5621e-30)    NS PDE Loss:  tensor(95.8721)   NS Div Free
```

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Loss:  tensor(1.6120e-38)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(402.1701)
Iteration: 23000     Total Loss: tensor(2239108.5000)
IC Loss:  tensor(0.0224)        BC Loss:  tensor(3.0351e-30)    NS PDE Loss:  tensor(95.9291)   NS Div Free
Loss:  tensor(1.9839e-38)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(30.6121)
Iteration: 23200     Total Loss: tensor(2.3035e+08)
IC Loss:  tensor(0.2000)        BC Loss:  tensor(2.0540e-30)    NS PDE Loss:  tensor(93.3621)   NS Div Free
Loss:  tensor(9.4593e-36)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(4206909.5000)
Iteration: 23400     Total Loss: tensor(5.2359e+10)
IC Loss:  tensor(2.1326)        BC Loss:  tensor(2.4507e-30)    NS PDE Loss:  tensor(36.5682)   NS Div Free
Loss:  tensor(8.3242e-35)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(1.0429e+09)
Iteration: 23600     Total Loss: tensor(25764.6367)
IC Loss:  tensor(0.0002)        BC Loss:  tensor(2.4413e-30)    NS PDE Loss:  tensor(95.9382)   NS Div Free
Loss:  tensor(3.3736e-39)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(120.2371)
Iteration: 23800     Total Loss: tensor(19279052.)
IC Loss:  tensor(1.9877e-05)    BC Loss:  tensor(8.0151e-24)    NS PDE Loss:  tensor(93.8937)   NS Div Free
Loss:  tensor(1.3880e-37)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(385539.4062)
Iteration: 24000     Total Loss: tensor(46414668.)
IC Loss:  tensor(3.4112e-08)    BC Loss:  tensor(2.0613e-23)    NS PDE Loss:  tensor(87.8653)   NS Div Free
Loss:  tensor(1.0818e-36)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(928291.5000)
Iteration: 24200     Total Loss: tensor(1468.8394)
IC Loss:  tensor(1.4688e-05)    BC Loss:  tensor(5.8722e-05)    NS PDE Loss:  tensor(0.0004)    NS Div Free
Loss:  tensor(1.8202e-28)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 24400     Total Loss: tensor(439.8456)
IC Loss:  tensor(4.3978e-06)    BC Loss:  tensor(1.7589e-05)    NS PDE Loss:  tensor(0.0663)    NS Div Free
Loss:  tensor(2.2207e-32)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 24600     Total Loss: tensor(253.7245)
IC Loss:  tensor(2.5370e-06)    BC Loss:  tensor(1.0146e-05)    NS PDE Loss:  tensor(0.0202)    NS Div Free
Loss:  tensor(3.9393e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 24800     Total Loss: tensor(184.4412)
IC Loss:  tensor(1.8443e-06)    BC Loss:  tensor(7.3748e-06)    NS PDE Loss:  tensor(0.0117)    NS Div Free
Loss:  tensor(1.5963e-32)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 25000     Total Loss: tensor(348.4966)
IC Loss:  tensor(3.4850e-06)    BC Loss:  tensor(1.3932e-05)    NS PDE Loss:  tensor(4.1835e-06)         NS
Div Free Loss:  tensor(2.1352e-37)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 25200     Total Loss: tensor(7.2318)
IC Loss:  tensor(4.6294e-08)    BC Loss:  tensor(1.7632e-07)    NS PDE Loss:  tensor(1.1341)    NS Div Free
Loss:  tensor(2.8230e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.0294)
Iteration: 25400     Total Loss: tensor(19.2048)
IC Loss:  tensor(1.9190e-07)    BC Loss:  tensor(7.6221e-07)    NS PDE Loss:  tensor(0.0151)    NS Div Free
Loss:  tensor(2.2547e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 25600     Total Loss: tensor(57.1865)
IC Loss:  tensor(5.7171e-07)    BC Loss:  tensor(2.2829e-06)    NS PDE Loss:  tensor(0.0155)    NS Div Free
```

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Loss:  tensor(3.0879e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 25800      Total Loss: tensor(6.6795)
IC Loss:  tensor(6.6780e-08)    BC Loss:  tensor(2.6443e-07)     NS PDE Loss:  tensor(0.0015)    NS Div Free
Loss:  tensor(1.0697e-32)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 26000      Total Loss: tensor(18.6320)
IC Loss:  tensor(1.8445e-07)    BC Loss:  tensor(7.2921e-07)     NS PDE Loss:  tensor(0.1872)    NS Div Free
Loss:  tensor(8.9027e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 26200      Total Loss: tensor(35.0866)
IC Loss:  tensor(3.5083e-07)    BC Loss:  tensor(1.4023e-06)     NS PDE Loss:  tensor(0.0040)    NS Div Free
Loss:  tensor(6.1145e-35)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 26400      Total Loss: tensor(31.3985)
IC Loss:  tensor(3.1388e-07)    BC Loss:  tensor(1.2540e-06)     NS PDE Loss:  tensor(0.0109)    NS Div Free
Loss:  tensor(8.3590e-31)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 26600      Total Loss: tensor(81.3482)
IC Loss:  tensor(8.1343e-07)    BC Loss:  tensor(3.2522e-06)     NS PDE Loss:  tensor(0.0052)    NS Div Free
Loss:  tensor(4.3619e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 26800      Total Loss: tensor(54.1032)
IC Loss:  tensor(5.4102e-07)    BC Loss:  tensor(1.2898e-06)     NS PDE Loss:  tensor(0.0011)    NS Div Free
Loss:  tensor(4.8844e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 27000      Total Loss: tensor(156.0365)
IC Loss:  tensor(1.5576e-06)    BC Loss:  tensor(6.2159e-06)     NS PDE Loss:  tensor(0.2787)    NS Div Free
Loss:  tensor(6.7893e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 27200      Total Loss: tensor(13.3868)
IC Loss:  tensor(1.3339e-07)    BC Loss:  tensor(5.2871e-07)     NS PDE Loss:  tensor(0.0481)    NS Div Free
Loss:  tensor(1.5772e-32)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 27400      Total Loss: tensor(47.1140)
IC Loss:  tensor(4.7086e-07)    BC Loss:  tensor(1.8798e-06)     NS PDE Loss:  tensor(0.0285)    NS Div Free
Loss:  tensor(1.9611e-32)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 27600      Total Loss: tensor(22.3641)
IC Loss:  tensor(2.2346e-07)    BC Loss:  tensor(8.9116e-07)     NS PDE Loss:  tensor(0.0180)    NS Div Free
Loss:  tensor(5.9778e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 27800      Total Loss: tensor(12.1019)
IC Loss:  tensor(1.2091e-07)    BC Loss:  tensor(4.8215e-07)     NS PDE Loss:  tensor(0.0107)    NS Div Free
Loss:  tensor(1.2384e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 28000      Total Loss: tensor(7.9234)
IC Loss:  tensor(7.4180e-08)    BC Loss:  tensor(2.8572e-07)     NS PDE Loss:  tensor(0.5054)    NS Div Free
Loss:  tensor(3.0797e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 28200      Total Loss: tensor(1.7165)
IC Loss:  tensor(1.7146e-08)    BC Loss:  tensor(6.8583e-08)     NS PDE Loss:  tensor(0.0019)    NS Div Free
Loss:  tensor(3.1147e-33)     Mv Bdry Jump_loss:  tensor(0.) SurfaceTension_loss:  tensor(0.)
Iteration: 28400      Total Loss: tensor(2.1948)
IC Loss:  tensor(2.1937e-08)    BC Loss:  tensor(8.7478e-08)     NS PDE Loss:  tensor(0.0011)    NS Div Free
```

Loss: tensor(1.0438e-33)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.)
Iteration: 28600   Total Loss: tensor(1.6333)
IC Loss: tensor(1.6326e-08)   BC Loss: tensor(6.5034e-08)   NS PDE Loss: tensor(0.0007)   NS Div Free
Loss: tensor(3.1425e-33)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.)
Iteration: 28800   Total Loss: tensor(2.0771)
IC Loss: tensor(2.0765e-08)   BC Loss: tensor(8.3061e-08)   NS PDE Loss: tensor(0.0006)   NS Div Free
Loss: tensor(2.0772e-32)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.)
Iteration: 29000   Total Loss: tensor(1.5616)
IC Loss: tensor(1.5612e-08)   BC Loss: tensor(6.2446e-08)   NS PDE Loss: tensor(0.0004)   NS Div Free
Loss: tensor(2.4904e-34)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.)
Iteration: 29200   Total Loss: tensor(81.0398)
IC Loss: tensor(8.1039e-07)   BC Loss: tensor(3.2416e-06)   NS PDE Loss: tensor(0.0003)   NS Div Free
Loss: tensor(2.7243e-32)   Mv Bdry Jump_loss: tensor(0.) SurfaceTension_loss: tensor(0.)
Iteration: 29400   Total Loss: tensor(2.6984e+08)
IC Loss: tensor(0.1102)   BC Loss: tensor(2.5235e-06)   NS PDE Loss: tensor(94.0647)   NS Div Free
Loss: tensor(1.4234e-36)   Mv Bdry Jump_loss: tensor(9.6287e-22) SurfaceTension_loss: tensor(517644
9.5000)
Iteration: 29600   Total Loss: tensor(6.8861e+08)
IC Loss: tensor(6.6835)   BC Loss: tensor(8.8296e-06)   NS PDE Loss: tensor(95.2825)   NS Div Free
Loss: tensor(5.0506e-37)   Mv Bdry Jump_loss: tensor(1.9020e-21) SurfaceTension_loss: tensor(40531
1.6562)
Iteration: 29800   Total Loss: tensor(2.2651e+08)
IC Loss: tensor(2.2637)   BC Loss: tensor(8.2953e-06)   NS PDE Loss: tensor(95.6281)   NS Div Free
Loss: tensor(5.9036e-38)   Mv Bdry Jump_loss: tensor(5.7982e-23) SurfaceTension_loss: tensor(2809.5
732)
Iteration: 30000   Total Loss: tensor(2.1155e+08)
IC Loss: tensor(2.1150)   BC Loss: tensor(5.4451e-06)   NS PDE Loss: tensor(95.8352)   NS Div Free
Loss: tensor(8.5250e-39)   Mv Bdry Jump_loss: tensor(1.6014e-23) SurfaceTension_loss: tensor(969.74
17)
Iteration: 30200   Total Loss: tensor(90165032.)
IC Loss: tensor(0.4284)   BC Loss: tensor(4.5407e-06)   NS PDE Loss: tensor(93.0223)   NS Div Free
Loss: tensor(4.3662e-36)   Mv Bdry Jump_loss: tensor(5.2098e-21) SurfaceTension_loss: tensor(94657
0.6875)
Iteration: 30400   Total Loss: tensor(23546084.)
IC Loss: tensor(0.2199)   BC Loss: tensor(2.6773e-06)   NS PDE Loss: tensor(95.2712)   NS Div Free
Loss: tensor(1.1439e-36)   Mv Bdry Jump_loss: tensor(1.3675e-22) SurfaceTension_loss: tensor(31098.
2168)
Iteration: 30600   Total Loss: tensor(2.9052e+08)
IC Loss: tensor(1.0038)   BC Loss: tensor(1.4230e-06)   NS PDE Loss: tensor(95.5294)   NS Div Free
Loss: tensor(3.5782e-37)   Mv Bdry Jump_loss: tensor(5.6719e-23) SurfaceTension_loss: tensor(380275
7.2500)
Iteration: 30800   Total Loss: tensor(30013202.)

IC Loss: tensor(0.3001)   BC Loss: tensor(5.6457e-13)   NS PDE Loss: tensor(95.8126)   NS Div Free
Loss: tensor(8.6304e-38)   Mv Bdry Jump_loss: tensor(3.9280e-24) SurfaceTension_loss: tensor(148.61
66)
Iteration: 31000   Total Loss: tensor(30003732.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.5397e-20)   NS PDE Loss: tensor(95.8609)   NS Div Free
Loss: tensor(2.1560e-38)   Mv Bdry Jump_loss: tensor(1.5284e-24) SurfaceTension_loss: tensor(52.211
5)
Iteration: 31200   Total Loss: tensor(30002742.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.3895e-20)   NS PDE Loss: tensor(95.8963)   NS Div Free
Loss: tensor(3.9103e-39)   Mv Bdry Jump_loss: tensor(1.3603e-24) SurfaceTension_loss: tensor(36.631
1)
Iteration: 31400   Total Loss: tensor(30002858.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.3737e-20)   NS PDE Loss: tensor(95.8707)   NS Div Free
Loss: tensor(1.3241e-38)   Mv Bdry Jump_loss: tensor(2.3321e-24) SurfaceTension_loss: tensor(30.255
1)
Iteration: 31600   Total Loss: tensor(30005660.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.2872e-20)   NS PDE Loss: tensor(95.8809)   NS Div Free
Loss: tensor(3.0139e-38)   Mv Bdry Jump_loss: tensor(2.0140e-24) SurfaceTension_loss: tensor(32.399
8)
Iteration: 31800   Total Loss: tensor(30000890.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.2769e-20)   NS PDE Loss: tensor(95.8950)   NS Div Free
Loss: tensor(2.8978e-38)   Mv Bdry Jump_loss: tensor(1.4648e-24) SurfaceTension_loss: tensor(9.631
7)
Iteration: 32000   Total Loss: tensor(30000978.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.2428e-20)   NS PDE Loss: tensor(95.9012)   NS Div Free
Loss: tensor(3.3781e-38)   Mv Bdry Jump_loss: tensor(1.5293e-24) SurfaceTension_loss: tensor(10.604
8)
Iteration: 32200   Total Loss: tensor(30001546.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.3268e-20)   NS PDE Loss: tensor(95.8900)   NS Div Free
Loss: tensor(2.7000e-38)   Mv Bdry Jump_loss: tensor(1.1924e-24) SurfaceTension_loss: tensor(17.533
8)
Iteration: 32400   Total Loss: tensor(30000856.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.3242e-20)   NS PDE Loss: tensor(95.9119)   NS Div Free
Loss: tensor(6.6382e-39)   Mv Bdry Jump_loss: tensor(1.0185e-24) SurfaceTension_loss: tensor(8.938
0)
Iteration: 32600   Total Loss: tensor(30001154.)
IC Loss: tensor(0.3000)   BC Loss: tensor(5.2530e-19)   NS PDE Loss: tensor(95.8961)   NS Div Free
Loss: tensor(9.8901e-39)   Mv Bdry Jump_loss: tensor(1.5527e-24) SurfaceTension_loss: tensor(18.679
4)
Iteration: 32800   Total Loss: tensor(30001184.)
IC Loss: tensor(0.3000)   BC Loss: tensor(8.3063e-19)   NS PDE Loss: tensor(95.9240)   NS Div Free
Loss: tensor(3.7093e-39)   Mv Bdry Jump_loss: tensor(1.0946e-24) SurfaceTension_loss: tensor(12.954

```
1)
Iteration: 33000      Total Loss: tensor(30000700.)
IC Loss: tensor(0.3000)        BC Loss: tensor(4.1470e-19)    NS PDE Loss: tensor(95.9170)   NS Div Free
Loss: tensor(2.1663e-38)       Mv Bdry Jump_loss: tensor(9.8897e-25) SurfaceTension_loss: tensor(8.838
7)
Iteration: 33200      Total Loss: tensor(20004488.)
IC Loss: tensor(0.2000)        BC Loss: tensor(1.2235e-18)    NS PDE Loss: tensor(95.8697)   NS Div Free
Loss: tensor(1.5586e-38)       Mv Bdry Jump_loss: tensor(1.3273e-24) SurfaceTension_loss: tensor(66.256
4)
Iteration: 33400      Total Loss: tensor(20001100.)
IC Loss: tensor(0.2000)        BC Loss: tensor(1.3731e-17)    NS PDE Loss: tensor(95.8810)   NS Div Free
Loss: tensor(1.4976e-38)       Mv Bdry Jump_loss: tensor(1.5543e-24) SurfaceTension_loss: tensor(14.238
1)
Iteration: 33600      Total Loss: tensor(20001522.)
IC Loss: tensor(0.2000)        BC Loss: tensor(5.9449e-10)    NS PDE Loss: tensor(95.8867)   NS Div Free
Loss: tensor(4.1517e-39)       Mv Bdry Jump_loss: tensor(2.1367e-24) SurfaceTension_loss: tensor(25.853
4)
Iteration: 33800      Total Loss: tensor(20000554.)
IC Loss: tensor(0.2000)        BC Loss: tensor(8.8002e-07)    NS PDE Loss: tensor(95.9153)   NS Div Free
Loss: tensor(6.3401e-37)       Mv Bdry Jump_loss: tensor(1.3414e-22) SurfaceTension_loss: tensor(5.633
2)
Iteration: 34000      Total Loss: tensor(20000794.)
IC Loss: tensor(0.2000)        BC Loss: tensor(1.6552e-06)    NS PDE Loss: tensor(95.9025)   NS Div Free
Loss: tensor(1.0285e-36)       Mv Bdry Jump_loss: tensor(4.3297e-22) SurfaceTension_loss: tensor(9.082
6)
Iteration: 34200      Total Loss: tensor(2.5777e+10)
IC Loss: tensor(7.2304)        BC Loss: tensor(1.4461e-10)    NS PDE Loss: tensor(55.2323)   NS Div Free
Loss: tensor(1.0312e-31)       Mv Bdry Jump_loss: tensor(7.5717e-15) SurfaceTension_loss: tensor(5.0107
e+08)
Iteration: 34400      Total Loss: tensor(1.4947e+09)
IC Loss: tensor(7.0372)        BC Loss: tensor(1.4248e-10)    NS PDE Loss: tensor(74.9742)   NS Div Free
Loss: tensor(3.7859e-32)       Mv Bdry Jump_loss: tensor(7.6708e-16) SurfaceTension_loss: tensor(158188
78.)
Iteration: 34600      Total Loss: tensor(7.4585e+08)
IC Loss: tensor(7.0105)        BC Loss: tensor(1.4105e-10)    NS PDE Loss: tensor(90.3937)   NS Div Free
Loss: tensor(2.2789e-33)       Mv Bdry Jump_loss: tensor(3.7031e-17) SurfaceTension_loss: tensor(89586
8.1250)
Iteration: 34800      Total Loss: tensor(8.0515e+09)
IC Loss: tensor(6.7222)        BC Loss: tensor(1.1943e-10)    NS PDE Loss: tensor(56.8701)   NS Div Free
Loss: tensor(2.7734e-31)       Mv Bdry Jump_loss: tensor(1.0968e-15) SurfaceTension_loss: tensor(1.4759
e+08)
Iteration: 35000      Total Loss: tensor(34115148.)
```

IC Loss: tensor(0.2367)   BC Loss: tensor(2.9739e-14)   NS PDE Loss: tensor(91.2362)   NS Div Free
Loss: tensor(1.0975e-32)   Mv Bdry Jump_loss: tensor(9.7421e-18) SurfaceTension_loss: tensor(20896
5.7188)
Iteration: 35200   Total Loss: tensor(2.6691e+08)
IC Loss: tensor(0.3001)   BC Loss: tensor(2.8246e-14)   NS PDE Loss: tensor(79.1343)   NS Div Free
Loss: tensor(1.1737e-31)   Mv Bdry Jump_loss: tensor(1.9049e-16) SurfaceTension_loss: tensor(473796
1.5000)
Iteration: 35400   Total Loss: tensor(3.1308e+10)
IC Loss: tensor(1.0188)   BC Loss: tensor(2.7290e-14)   NS PDE Loss: tensor(75.5658)   NS Div Free
Loss: tensor(6.9146e-32)   Mv Bdry Jump_loss: tensor(6.6839e-18) SurfaceTension_loss: tensor(6.2412
e+08)
Iteration: 35600   Total Loss: tensor(1.4469e+08)
IC Loss: tensor(1.3013)   BC Loss: tensor(1.7499e-14)   NS PDE Loss: tensor(91.7859)   NS Div Free
Loss: tensor(1.1814e-32)   Mv Bdry Jump_loss: tensor(1.5621e-18) SurfaceTension_loss: tensor(29116
9.8125)

```
---------------------------------------------------------------------------
RuntimeError                              Traceback (most recent call last)
Cell In[1], line 319
    314                   print("IC Loss: ", mse_IC.data, "\tBC Loss: ", mse_BC.data, "\tNS PDE Loss: ",
mse_NS.data, "\tNS Div Free Loss: ", mse_NSdiv.data, "\tMv Bdry Jump_loss: ", Jump_loss.data ,"\tSurfaceTen
sion_loss: ", SurfaceTension_loss.data)
    318 create_network(True)
--> 319 create_network(False)

Cell In[1], line 77, in create_network(IC_Only_Train)
     74     iterations = 2 #0000
     75     learning_rate = 10**-5
---> 77 training_loop(net, x_domain, y_domain, t_zero, x_Bdry, y_Bdry, x_l_Bdry, x_u_Bdry,
     78             y_l_Bdry, y_u_Bdry, time_slices, iterations, learning_rate, IC_coefficient = 1, recor
d_loss = 100, print_loss = 200)
     79 torch.save(net.state_dict(), f"NNlayers_Bubble_{i}.pt")
     80 np.savetxt('epsilon.txt', epsilon)

Cell In[1], line 256, in training_loop(net, x_domain, y_domain, t_zero, x_Bdry, y_Bdry, x_l_Bdry, x_u_Bdry,
y_l_Bdry, y_u_Bdry, time_slices, iterations, learning_rate, IC_coefficient, record_loss, print_loss)
    253 net.optimizer.zero_grad()
    255 #Loss based on Initial Condition
--> 256 mse_IC = lossIC(net, x_domain, y_domain, t_zero)
    257 # Gradient Norm Clipping
    258 torch.nn.utils.clip_grad_norm_(net.parameters(), max_norm= 5*10**2, norm_type=1, error_if_nonfinite
=False)

File ~/Desktop/24Summer/PINN_of_Bubble/7_23S/InitialConditionLoss.py:45, in lossIC(net, x, y, t_zero)
     42 #predicted_fluid = torch.clamp(predicted_fluid, min = 10**-3, max = 1-10**-3)
     43 target = (1000 - rho_IC)/900
---> 45 rho_IC_loss = BinaryCrossEntropy(predicted_fluid, target)
     48 #u1_error = u1_initial- u1_IC
     49 #u1_error_normalized = u1_error/(torch.max(torch.abs(u1_error)+.01))
     50 #u1_IC_loss = mse_cost_function(u1_error_normalized, zero)
     51 u1_IC_loss = mse_cost_function(u1_initial, u1_IC)

File /opt/anaconda3/lib/python3.11/site-packages/torch/nn/modules/module.py:1511, in Module._wrapped_call_i
mpl(self, *args, **kwargs)
   1509     return self._compiled_call_impl(*args, **kwargs)  # type: ignore[misc]
   1510 else:
-> 1511     return self._call_impl(*args, **kwargs)
```

```
File /opt/anaconda3/lib/python3.11/site-packages/torch/nn/modules/module.py:1520, in Module._call_impl(sel
f, *args, **kwargs)
   1515 # If we don't have any hooks, we want to skip the rest of the logic in
   1516 # this function, and just call forward.
   1517 if not (self._backward_hooks or self._backward_pre_hooks or self._forward_hooks or self._forward_pr
e_hooks
   1518         or _global_backward_pre_hooks or _global_backward_hooks
   1519         or _global_forward_hooks or _global_forward_pre_hooks):
-> 1520     return forward_call(*args, **kwargs)
   1522 try:
   1523     result = None

File /opt/anaconda3/lib/python3.11/site-packages/torch/nn/modules/loss.py:618, in BCELoss.forward(self, inp
ut, target)
    617 def forward(self, input: Tensor, target: Tensor) -> Tensor:
--> 618     return F.binary_cross_entropy(input, target, weight=self.weight, reduction=self.reduction)

File /opt/anaconda3/lib/python3.11/site-packages/torch/nn/functional.py:3127, in binary_cross_entropy(inpu
t, target, weight, size_average, reduce, reduction)
   3124     new_size = _infer_size(target.size(), weight.size())
   3125     weight = weight.expand(new_size)
-> 3127 return torch._C._nn.binary_cross_entropy(input, target, weight, reduction_enum)

RuntimeError: all elements of input should be between 0 and 1
```

In [ ]:

In [ ]: