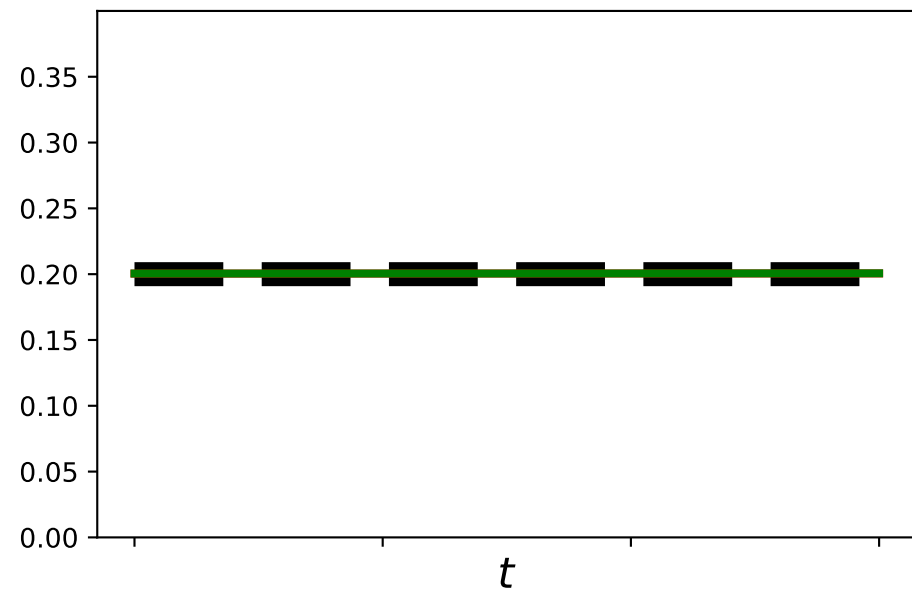


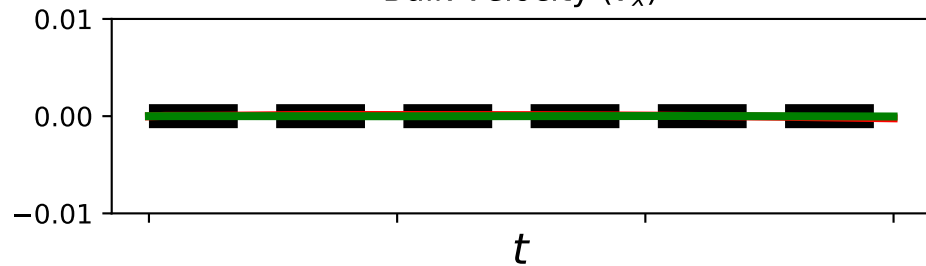
# Physical Quantities

## Trained for 4000 epochs

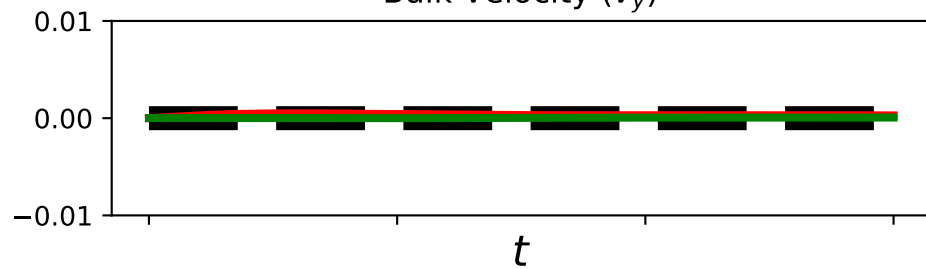
Mass Density ( $\rho$ )



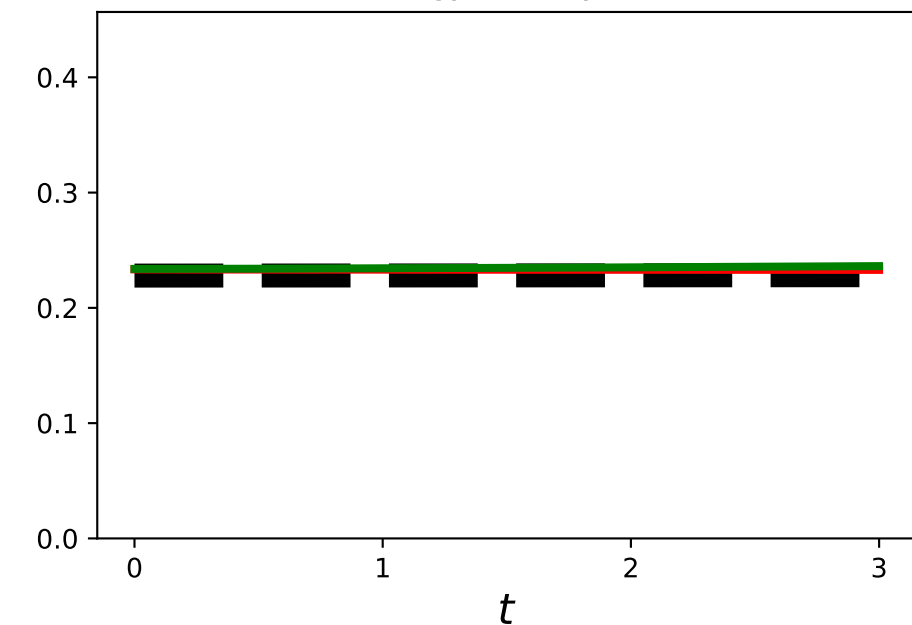
Bulk Velocity ( $v_x$ )



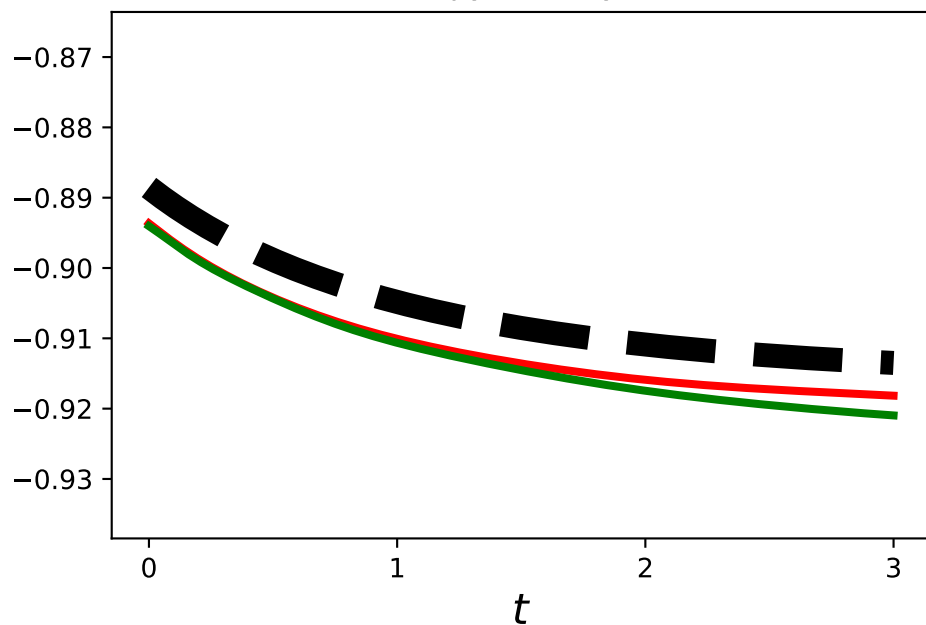
Bulk Velocity ( $v_y$ )



Energy Density ( $E$ )



Entropy Density ( $S$ )



Target opPINN PINN (ours)