Predictions MSE between codotalattes -conserved quantity tal energy 5.0 Ground truth Baseline NN Ground truth Ground truth Baseline NN Hamiltonian NN Baseline NN Baseline NN 3 4.7 Hamiltonian NN Hamiltonian NN Hamiltonian NN 4.9 2 4.8 4.8 4.9 4.7 0 15.0 4.6 **-**2 0 -2.50.0 2.5 20 20 20 Time step Time step Time step