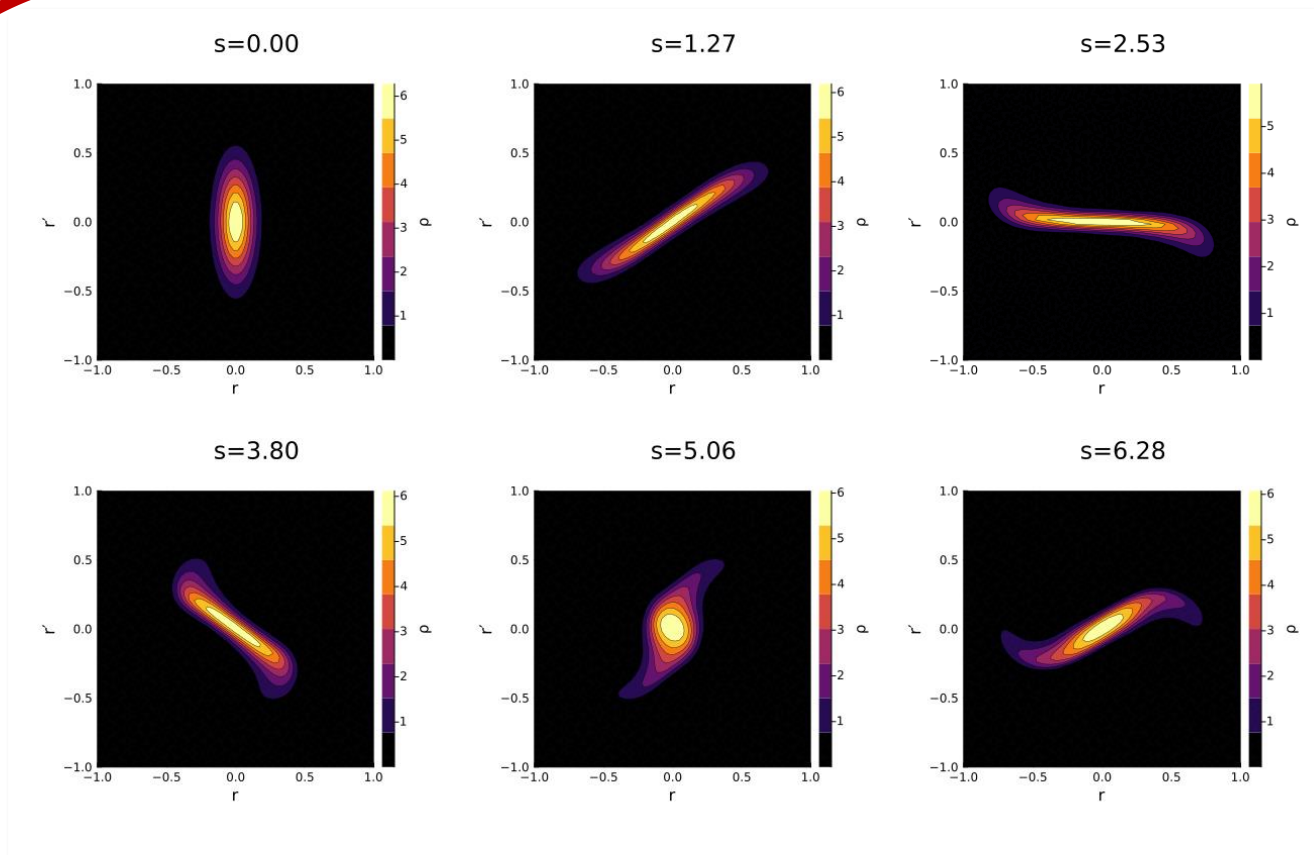
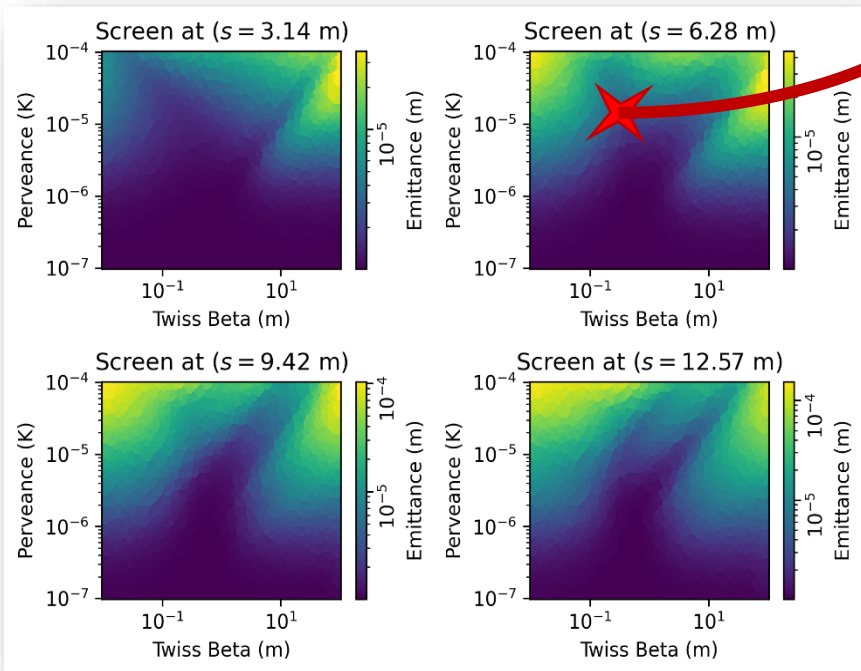


Physics-Informed Surrogates Enhance Data-Driven Models with Knowledge of Physical Systems

Uniform Focusing Channel Dataset

Trained PINN ($K = 1.6e-5$, $\text{Beta} = 0.34$)



PINNs can be trained in challenging high space charge regime. Physics-informed priors significantly improve the accuracy of the surrogate model.