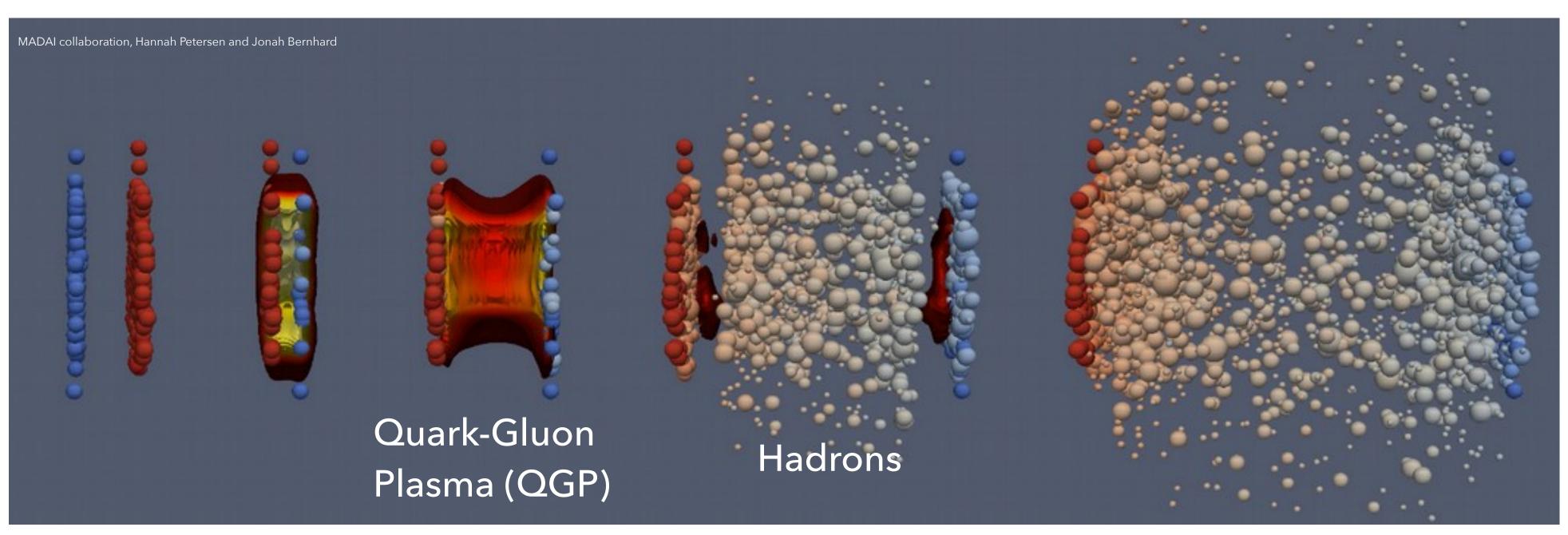
HEAVY-ION COLLISIONS





collision systems

Au+Au @ 200 GeV

Pb+Pb @ 2.76 TeV

Pb+Pb @ 5.02 TeV

particlization models

Grad

Chapman-Enskog

Pratt-Torrieri-Bernhard

account for model uncertainties

TRANSFER LEARNING

 $x_1^S x_2^S x_3^S \cdots$

parameter space $\mathbf{x}=(x_1,x_2,...,x_q)$ (shared by source and target) source

high-fidelity at fine design points

 $f_T(\mathbf{x}) = \rho f_S(\mathbf{x}) + \delta(\mathbf{x})$ $f_S(\mathbf{x}) \sim \text{GP}\{\mu_S, k_S^{\text{SE}}(\cdot, \cdot)\}$ $\delta(\mathbf{x}) \sim \text{GP}\{\mu_\delta, k_\delta^{\text{SE}}(\cdot, \cdot)\}$

target

 $oldsymbol{x}_1^T \qquad oldsymbol{x}_2^T \qquad oldsymbol{x}_3^T \qquad \cdots$

high-fidelity at coarser design points

