Quarta feira (10/04) – 16:00 - Auditório Meson Pi

Palestrante: Andre Vega Giannini

Bulk quantities in nuclear collisions from running coupling kT-factorization and hybrid simulations

Starting from a Color Glass Condensate (CGC) framework, based on a running-coupling improved k_T -factorized formula, we calculate bulk observables in several heavy-ion collision systems in a wide range of collision energies. This is done in two ways: first we calculate the particle distribution directly implied from the CGC model, and we compare this to the case where it is instead used as initial conditions for a hybrid hydrodynamic simulation. This procedure allows to assess the effects of hydrodynamic and hadronic evolution and quantify to what extent initial condition models can be directly compared to experimental data. In this talk we present the results of such comparison and comment how the current calculations can be improved in the future