QM 2022



Contribution ID: 897

Type: Poster

JEWEL for Small Systems

Wednesday 6 April 2022 18:38 (4 minutes)

Despite almost a decade of work, the absence of jet-modification in small systems is yet to be satisfactorily explained. Although JEWEL (Jet Evolution With Energy Loss) is a Monte Carlo (MC) generator designed to study the evolution of jets with a variety of background media, the publicly available versions are not able to simulate small systems. We present the first results using an adaptation of JEWEL that is appropriate for small colliding systems such as pPb, dAu, and very peripheral AA: Building on the radially symmetric hydrodynamic interface developed by Korinna Zapp, we allow for (2+1)D generality, thereby allowing for the first-ever MC jet data that is faithful to the underlying dynamics of small colliding systems. We present comparisons with experimental data for jet observables in a multitude of colliding systems, as well as predictions for OO, using a variety of publicly available hydrodynamical simulations.

Author: Dr KOLBE, Isobel (Institute for Nuclear Theory)Presenter: Dr KOLBE, Isobel (Institute for Nuclear Theory)Session Classification: Poster Session 2 T05 / T13

Track Classification: QGP in small and medium systems