XXIV QUARK MATTER DARMSTADT 2014

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MUSIC and MARTINI with a Hadronic Afterburner

Tuesday 20 May 2014 16:30 (2 hours)

We present our improved event generator for heavy ion collisions which combines MUSIC, MARTINI and UrQMD.
This combines hydrodynamic evolution QGP starting with the IP-Glasma and MC-Glauber initial conditions (MUSIC),
jet production and propagation through the evolving medium (MARTINI) and the final hadronic interactions of the bulk and jet particles
using the UrQMD. The result is generation of full events for relativistic heavy ion collisions consistently including both
the soft and hard physics of each event.

In this talk, we will present our first results on jet quenching, high and low p_T di-hadron correlations, and
effects on v_2 and v_3 with an emphasis on the difference between the IP-Glasma and the MC-Glauber initial conditions.
These calculations will be compared to recent RHIC and the LHC data and implications for future work will be discussed.

On behalf of collaboration:

None

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