

HIJING++ Monte Carlo Generator for the Future Heavy-ion Collisions

Tuesday 30 May 2017 18:34 (2 minutes)

The development of a new-generation particle Monte Carlo generator for simulating high-energy heavy-ion collisions, HIJING++ is under development. The completely rewritten version of the FORTRAN-based HIJING2.1 relies on the latest version of PYTHIA8 and contains all the nuclear effects that have been included in the HIJING2.1. The code is written in C++ and due to its modularity, supports parallel computing architectures. Applying these techniques, relevant speedup of the simulation can be achieved. We also included an improved version of the shadowing parametrization and working on the jet quenching module. Here we summarize the major changes of the new program code beside the comparison between experimental data.

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Session Classification: Poster session