

How to select events which evolved similarly?

Events that started with very similar initial conditions should also evolve similarly and produce similar single-particle distributions of hadrons. This is natural consequence of hydrodynamic description of a collision. We present a novel method for data analysis. It compares the histograms of azimuthal hadron distributions from each event and organizes the events in such a way that those with similar histograms end-up placed close to each other. Those are the ones which underwent similar evolution. Such events can more easily be compared to theoretical simulations where all conditions can be controlled. We illustrate the method on data simulated by the AMPT model. Finally, we speculate about other possible applications of the method.

Preferred Track

Correlations and Fluctuations

Collaboration

Not applicable

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