Contribution ID: **467** Type: **not specified**

Event shape sorting

Friday, 2 September 2016 13:19 (5 minutes)

We present novel method for the organisation of events. The method is based on comparing event-by-event histograms of a chosen quantity Q that is measured for each particle in every event. The events are organised in such a way that those with similar shape of the Q-histograms end-up placed close to each other.
We apply the method on histograms of azimuthal angle of the produced hadrons in ultrarelativsitic nuclear collisions. By selecting events with similar azimuthal shape of their hadron distribution one chooses events which are likely that they underwent similar evolution from the initial state to the freeze-out. 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.

Primary author: TOMASIK, Boris (Univerzita Mateja Bela (SK))

Presenter: TOMASIK, Boris (Univerzita Mateja Bela (SK))

Session Classification: Plenary