

Space-time evolution of the spin polarization for Bjorken hydrodynamical scenario.

Friday, 25 October 2019 15:40 (1 minute)

Using relativistic hydrodynamic equations for polarized spin 1/2 particles we determine the space-time evolution of the spin polarization in the system. In our approach we use the forms of the energy-momentum and spin tensors based on de Groot, van Leeuwen, and van Weert. The calculations are done in a boost-invariant and transversely homogeneous setup. We present how the formalism of hydrodynamics with spin can be used for the determination of physical observables related to the spin polarization required for the modeling of the experimental data.

Summary

Primary author: SINGH, Rajeev (Institute of Nuclear Physics Polish Academy of Sciences)

Presenter: SINGH, Rajeev (Institute of Nuclear Physics Polish Academy of Sciences)

Session Classification: Posters and Coffee

Track Classification: Fundamental Interactions