XIV Polish Workshop on Relativistic Heavy-Ion Collisions: Interplay between soft and hard probes of heavy-ion collisions



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Spin Polarization Dynamics for the Bjorken Hydrodynamic Background.

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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.

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