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## Boost-invariant spin hydrodynamics with spin feedback effects

A recently formulated extension of perfect spin hydrodynamics, which includes second-order corrections in the spin polarization tensor to the energy-momentum tensor and baryon current, is studied in the case of a one-dimensional boost-invariant expansion. The presence of second-order corrections introduces feedback from spin dynamics on the hydrodynamic background, constraining possible spin polarization configurations. However, as long as the magnitude of the spin polarization tensor remains small (below unity in natural units), the permitted spin dynamics differs very little from that found in the case without the second-order corrections.

Based on: Z.Drogosz, W.Florkowski, N.Łygan, R.Ryblewski, Boost-invariant spin hydrodynamics with spin feedback effects, arXiv:2411.06154 [hep-ph].

### Category

Theory

### Collaboration (if applicable)

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