

The 8th International Conference on Chirality, Vorticity and Magnetic Field in Quantum Matter



ID de Contribution: 57

Type: **Talk**

Latest updates on ideal-spin hydrodynamics

mardi 23 juillet 2024 16:30 (30 minutes)

Spin hydrodynamics can be developed from a systematic expansion in the reduced plank constant. Up to the first order in this expansion, there is no back-reaction from the spin to fluid dynamics, and, therefore, solutions to the standard hydrodynamics act as an input for the equations of motion for the spin tensor. Furthermore, one can assume a so-called ideal-spin approximation where the entropy production from the spin degrees of freedom is second-order in the reduced plank constant and the conservation of angular momentum is a closed system of equations. In this talk, I present developments in ideal-spin hydrodynamics including the linear regime, the covariance of spin dynamics, and the spin dynamics on top of Bjorken attractors.

Auteur principal: SHOKRI, Masoud (Goethe University)

Co-auteurs: WAGNER, David; RISCHKE, Dirk (Goethe-University Frankfurt)

Orateur: SHOKRI, Masoud (Goethe University)

Classification de Session: Hydrodynamics