

# India-JINR workshop on elementary particle and nuclear physics, and condensed matter research

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## Relativistic spin-(magneto)hydrodynamics

*Tuesday, 17 October 2023 10:00 (30 minutes)*

Relativistic dissipative hydrodynamics has been applied quite successfully to understand the space-time evolution of strongly interacting hot and dense matter formed in high energy heavy-ion collisions. Recent relativistic heavy-ion collision experiments have also found evidence for the generation of strong magnetic field and global angular momentum. The presence of these effects requires us to revisit our formulation of relativistic hydrodynamics.

I will outline our contribution in the development of hydrodynamic formulation for evolution of a dissipative fluid having global angular momentum and in the presence of a magnetic field.

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