

**Plenarvortrag**

PV VIII Fr 9:00 Audimax

**Flow and fluctuations in high energy nuclear collisions —**

•STEFAN FLOERCHINGER — Institut für Theoretische Physik, Universität Heidelberg, Philosophenweg 16, 69120 Heidelberg

The QCD fluid produced by heavy ion collisions at RHIC or the LHC is subject to various fluctuations, for example in the energy density, fluid

velocity, baryon number density or shear stress. Much can be learned from a detailed analysis of the origins, dynamical evolution and observable consequences of such perturbations in the fluid fields. I will give an introduction and overview for this field of research and highlight some parallels to cosmology where a similar analysis of fluctuations allows to constrain the properties of dark matter.