

## From high-energy collisions to hydrodynamics in strongly coupled non-conformal theories

*Wednesday 25 May 2016 18:10 (20 minutes)*

Ever since fast hydrodynamization has been observed in heavy ion collisions at RHIC, attempts to understand this feature of the very early non-equilibrium stage have been made. We use the gauge/string duality to model the evolution of strongly coupled Quark-Gluon plasma in a non-conformal gauge theory. The non-trivial equation of state and the presence of a time dependent bulk viscosity change the evolution of planar shockwaves. The effect of this non-conformality shows an increase of the relaxation times of the resulting plasma.

**Primary author:** ATTEMS, maximilian (University of Barcelona)

**Co-authors:** Dr SOPUERTA, Carlos (Institut de Ciències de l'Espai); Mr SANTOS, Daniel (Institut de Ciències de l'Espai); MATEOS, David (ICREA & U. Barcelona); CASALDERREY SOLANA, Jorge (University of Barcelona (ES)); Dr ZILHAO, Miguel (Universitat de Barcelona); TRIANA, Miquel (Universitat de Barcelona)

**Presenter:** ATTEMS, maximilian (University of Barcelona)

**Session Classification:** Parallel