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## Hybrid modelling of relativistic heavy ion collisions

*Tuesday 12 May 2015 10:40 (40 minutes)*

We review current concepts and models used to describe the evolution of the hot and dense matter created in heavy ion collisions at LHC, RHIC and FAIR. To this aim, we will discuss recent extensions of transport models based on the Boltzmann equation to include a hydrodynamical stage that allows for a consistent treatment of all stages of the reaction, including a phase transition to a QGP. Then we discuss how a dynamical model for the exploration of the critical point of QCD and the phase transition can be constructed and present results for a broad variety of observables for heavy ion collisions at FAIR, RHIC and LHC.

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