Introduction to Heavy-ion collisions and Quarks and Gluons Plasma - 22nd to 26th of June

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Introduction lectures to the physics of heavy-ion collisions and the QGP physics for master 2 and starting PhD students. Lectures will start at 10:00 am and will be 1h30 long.

Zoom link : https://cern.zoom.us/j/9939080576

- **MONDAY : GENERAL INTRODUCTION**
  - The QCD Lagrangian
  - Thermodynamics of relativistic gas
  - Toolkit for experimentalists

- **TUESDAY : MODELING QCD MATTER**
  - The Hagedorn Temperature
  - The MIT bag model
  - Thermodynamics of pion gas and QGP
  - Lattice QCD and the phase diagram of matter

- **WEDNESDAY : TOWARD A STANDARD MODEL OF HIC**
  - Describing a HIC : hydrodynamics
  - The Bjorken scenario
  - Probing the deconfined phase of QCD

- **THURSDAY : HYDRODYNAMICS AND BULK PROPERTIES**
  - Glauber model and centrality
  - Probing the deconfined phase of QCD
  - Small systems

- **FRIDAY : HEAVY-FLAVORS**
  - Introducing the Heavy-flavour
  - Heavy-Flavour in AA collisions
  - Heavy-Flavour in pA collisions