

Title: From Heavy-Ion collisions to Quark Matter

Lecturer: Constantin Loizides

Date and times: July 19,20 and 22, 2016

Office hour: July 22, 2016

Summary of the lecture:

The three lectures provide an overview on the physics of heavy-ion collisions. After an introduction into some of the theoretical concepts, the main emphasis is put on the experimental activities and results from heavy-ion collisions at RHIC and LHC in view of studying the properties of QCD matter (Quark-Gluon matter) at high temperature and energy density.

Prerequisite knowledge and references:

No prior knowledge of heavy-ion physics assumed. Basic knowledge in particle physics will be helpful. References will be provided during the lectures.

Short CV:

- 1998 Summer student (on the NA49 experiment)
- 2001 Physics degree (on lattice QCD)
- 2005 PhD in nuclear physics at University of Frankfurt
(on the prospects of jet physics with ALICE)
- 2005-2010 Postdoc and from 2008 research scientist at MIT
(on the PHOBOS and CMS experiments)
- 2010-now Divisional fellow at LBNL (on ALICE)

Publications:

See <http://loizides.web.cern.ch/loizides/> for a list of selected publications and presentations.