



## KCETA Colloquium

# High Density QCD with Heavy-Ion and Proton Beams

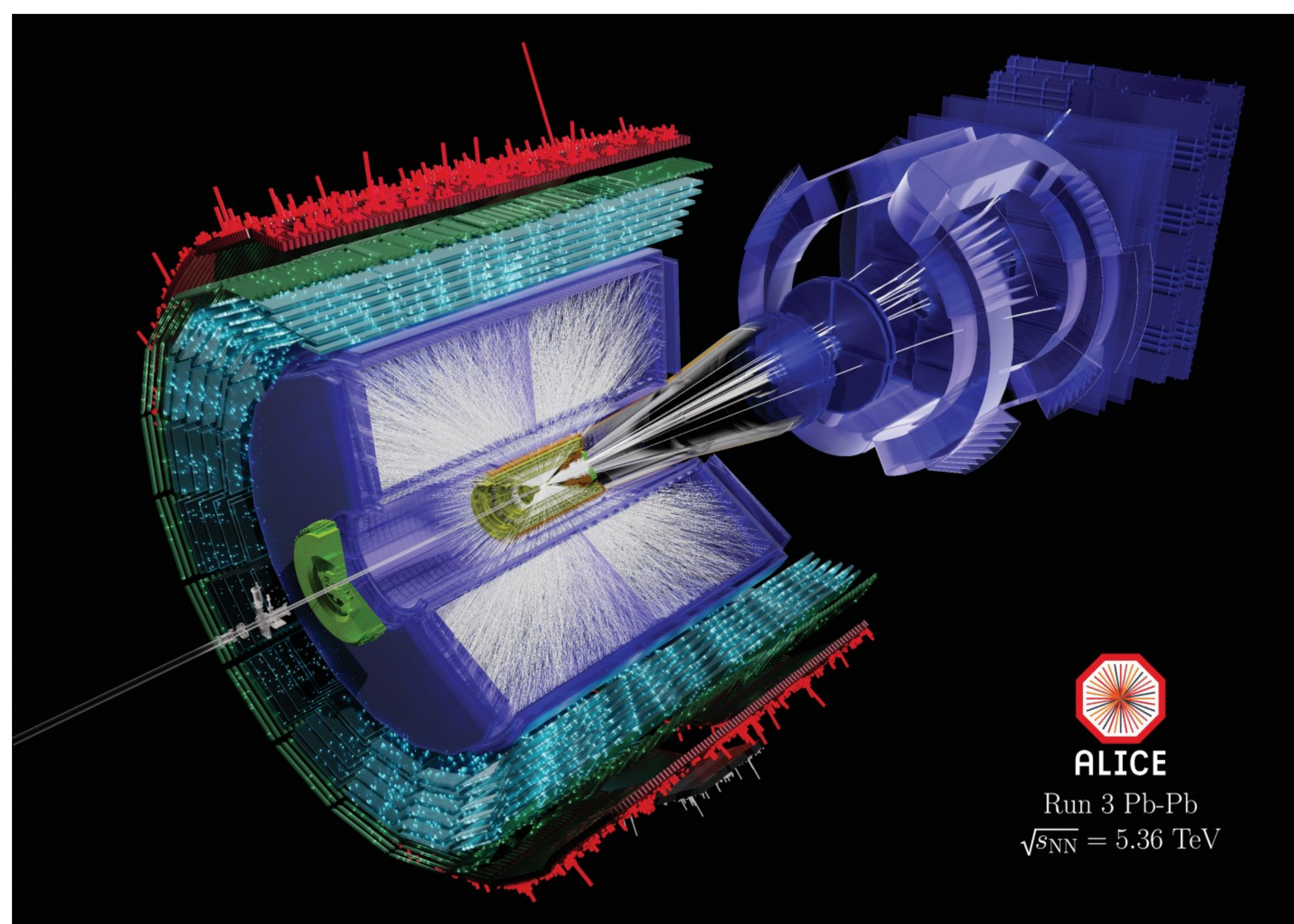
Thursday, December 21, 2023

Kleiner Hörsaal A (CS) 15:45 - 17:00

Dr. Jan Fiete Grosse-Oetringhaus  
(CERN)

It is more than 35 years ago that the first heavy-ion collisions occurred at CERN and in the meanwhile an exploratory field has grown into a precision era.

The seminar will give a review of studies of the high-density regime of the QCD phase diagram with heavy-ion and proton beams. The nature of the Quark-Gluon Plasma, the onset of its production as well as the transition to hadrons will be discussed. A set of observables will be introduced which allow one to understand the key properties of the Quark-Gluon Plasma. Finally, measurements relevant to astroparticle physics will be discussed.



Please note: The colloquium will also be live-streamed to B401 SR 410 (CN).

KIT Center Elementary Particle and Astroparticle Physics (KCETA)  
[www.kceta.kit.edu](http://www.kceta.kit.edu)