
The 114th HENPIC seminar by Prof. Hideki Hamagaki (Nagasaki Institute of Applied Science), July 23rd, 2020, Thursday, 10:30 am (Beijing time)

Talk title: Study of Exotic Particles using High Energy Heavy Ion Collisions

Speaker : Prof. Hideki Hamagaki (Nagasaki Institute of Applied Science)

Abstract:

Possibility of studying exotic particles utilizing the high-energy heavy-ion collisions has been considered since the onset of studies at LBL-BEVALAC. Notable study at BNL-AGS was the search for strangelet, an ultimate form of dense nuclear matter. Recently at colliders, BNL RHIC and CERN LHC, interesting studies have been performed; one on the di-baryons with strangeness and the other on the pentaquarks. In this seminar, after brief historical introduction of the old studies, I will mainly concentrate on the recent progress on the studies of di-baryons at RHIC and LHC. I will also present prospect of the studies mainly at LHC in near future.

Introduction of myself in brief: I am currently a professor of Nagasaki Institute of Applied Science, since April, 2016. I have been a professor of Center for Nuclear Study, University of Tokyo beforehand. I have been interested in nuclear and quark matter under extreme conditions, and I have been studying experimentally the properties of such matter with high energy heavy ion collisions since 1980. After spending several years at LBL BEVALC, I moved to AGS at BNL. I conducted the AGS E866 experiment to measure proton density at central rapidity in Au + Au collisions. At RHIC, I have been involved in the PHENIX experiment from the design stage. I was in charge of construction and operation of RICH (Ring Imaging Cherenkov Counter), which was the primary device for electron identification. In 2010, I joined the ALICE experiment at CERN. I have some expertise in the GEM detector, and I have been involved in the ongoing ALICE TPC upgrade.
