



heavy-ions at a speed close to that of light, scientists aim to obtain – albeit over a tiny volume of the size of a nucleus and for an infinitesimally short instant - a QGP state. This QGP state can be observed by dedicated experiments as it reverts to hadronic matter through expansion and cooling. The LHC creates QGP in the laboratory by creating a state of very high temperature and densities, whereas the FAIR facility at GSI, Darmstadt, Germany will create the same by producing high baryon density matter through compression.

IIT Indore will play a major role in building the Gas Electron Multiplier (GEM) detector for the detection of subatomic particles produced in the collision. We shall take part in the physics simulation, detector R & D and physics data analysis, says Prof. Sahoo, who is the lead scientist from IIT Indore and the Principal Investigator of both ALICE and CBM projects. He is also the member of Collaboration Boards of ALICE and CBM experiments. Trained as a high energy physicist through his Ph.D. at RHIC and subsequently postdoctoral research at RHIC (French national laboratory- Subatech, Nantes) and LHC (INFN Fellow, INFN Padova), Prof. Sahoo has created a very active group at IIT Indore to work in these frontier research areas. The GEM detector has got potential applications in biomedical engineering and allied applications. IIT Indore's Physics discipline in collaboration with Biosciences and Bioengineering and Electrical Engineering disciplines will explore possible detector development for such interdisciplinary applications.