



NUSTAR Seminar

Rudrajyoti Palit

Tata Institute of Fundamental Research, Mumbai-400005, India

Wednesday, Nov. 06, 2019 at 14:30 p.m.

Seminar Room Theory SB3.3.170a

GSI, Planckstraße 1, 64291 Darmstadt

“Exploring new aspects of spinning nuclei with Digital INGA”

The high-resolution gamma-ray spectroscopy using a large array of germanium detectors continues to play a pivotal role in the study of the atomic nuclei. Indian National Gamma Array (INGA) is a powerful “femtoscope” for the study of the structure of atomic nuclei at high spins. We will discuss some of the results on novel nuclear excitation modes and isomers from the experimental campaign of INGA coupled to a digital data acquisition system at BARC-TIFR Pelletron Linac Facility at TIFR, Mumbai. In addition, the need for electromagnetic moment measurements of the excited states will be highlighted. The upgrade plan of the INGA to improve its detection capability will also be presented.