



# Project: Facility for Antiproton and Ion Research (FAIR)

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## Research at FAIR: from neutron star to cancer therapy



### Abstract:

- The Facility for Anti-proton and Ion Research (FAIR) is one of the largest accelerators being built at Darmstadt, Germany. A wide range of scientific research will be performed using this machine. The entire research program at FAIR has four distinct areas namely (i) Nuclear Structure, Astrophysics and Reactions, (ii) Study of matter at high baryon densities, (iii) Study of the structure of the hadrons and (ii) Atomic and Plasma physics and their application in radiation therapy. A large number of scientists and technologists are involved in the planning of the upcoming experiments to achieve the goals. Details of FAIR experimental programme with emphasis on India's involvement will be discussed.

### About the Speaker:

- Dr. Supriya Das is currently an Associate Professor at the Department of Physics of Bose Institute Kolkata. Dr. Das obtained his PhD from the University of Jadavpur, Kolkata. During his doctoral research at Variable Energy Cyclotron Center, Kolkata, he worked on development of a gas based Photon Multiplicity Detector which was used to measure the number and spatial distribution of photons coming from the ultra-relativistic heavy-ion collisions in the STAR experiment at RHIC. Dr. Das spent two years at GSI working on the development of the Ring Imaging Cherenkov detector for the CBM experiment at FAIR. After coming back to the country he was at Saha Institute of Nuclear Physics for a short while working on Muon detection in ALICE experiment before joining Bose Institute to start a research group in experimental high energy physics.

