Großes Physikalisches Kolloquium an der Universität zu Köln

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17.10.2017 16⁴⁵ Uhr / HS III

Finnesvortrae

FAIR - The Universe in the Laboratory



be FAIR will the next-generation facility for fundamenand applied research with antiprotons and ion beams. tal It will provide world-unique accelerator and experimental facilities, allowing for a great variety of unprecedented forefront research in physics and applied sciences. FAIR is an international project with 10 partner countries and more than 2500 scientists and engineers from more than 50 countries involved in the preparation of the experiments. FAIR research focuses on the structure and evolution of matter on both a microscopic and a cosmic scale, bringing our Universe into one laboratory. The FAIR four scientific pillars will expand our knowledge in various fields beyond current frontiers, addressing the structure of hadrons and nuclei, the properties of matter at extreme densities, the key processes in nuclear astrophysics and a variety of applications of nuclear beams to Biophysics and Material Science. The talk will introduce FAIR, its unique scientific Opportunities, and the status of the realization of the project.

