



Tata Institute of Fundamental Research, Mumbai



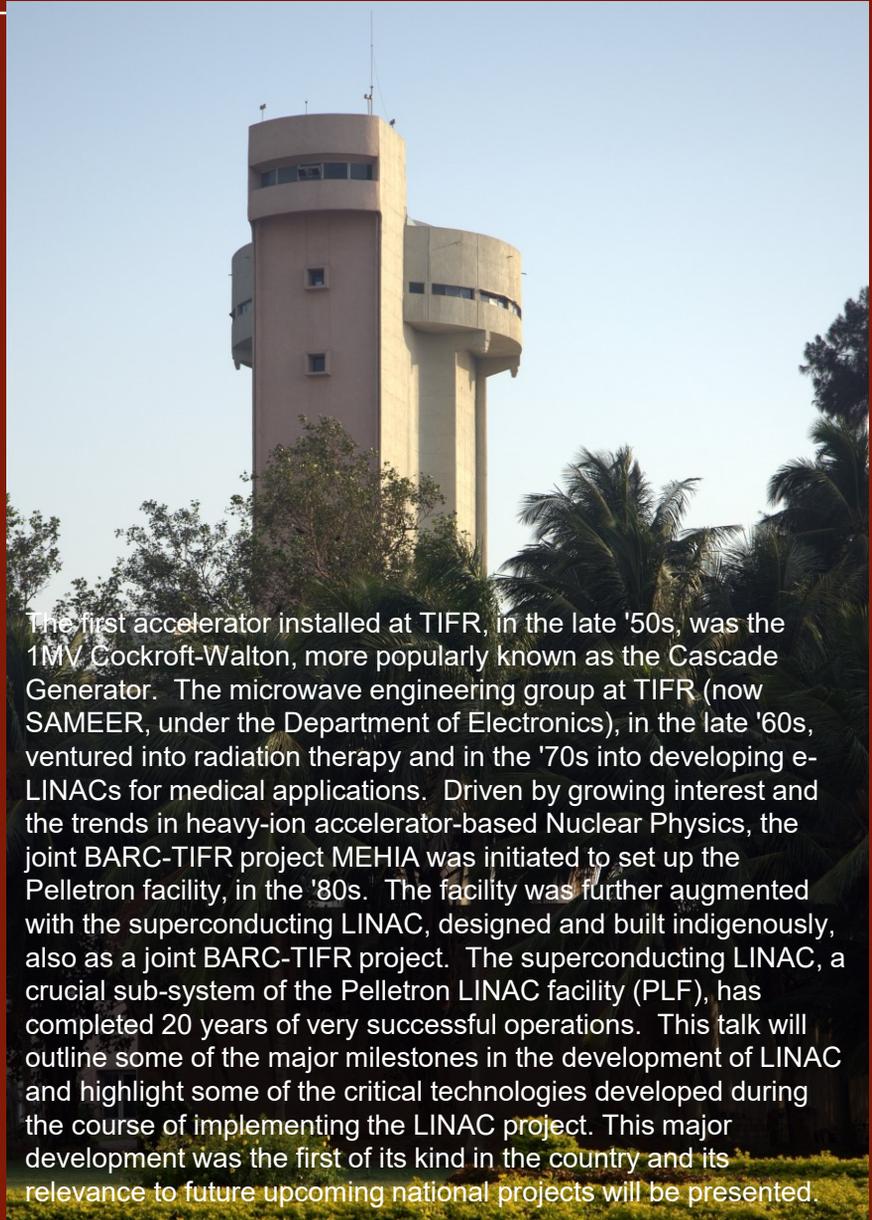
Prof. R.G. Pillay joined TIFR in 1974. His research interests span many areas of physics covering Nuclear Physics, Accelerator Physics, Condensed

Matter Physics and Material Science. He set up the first national HPGe-based high spin spectrometer for nuclear structure studies at TIFR. He played a major role in the development of Heavy Ion Superconducting Linac Booster at the BARC-TIFR Pelletron accelerator facility in Mumbai. He is involved in a national project TinTin – to search for neutrino-less double beta decay in ^{124}Sn . He was awarded the M.M. Chugani Memorial award for 2016 and has also been awarded the prestigious DAE-BRNS Raja Ramanna Fellowship.



Development of accelerator and associated technologies at TIFR

Prof. R.G. Pillay, TIFR Mumbai



The first accelerator installed at TIFR, in the late '50s, was the 1MV Cockcroft-Walton, more popularly known as the Cascade Generator. The microwave engineering group at TIFR (now SAMEER, under the Department of Electronics), in the late '60s, ventured into radiation therapy and in the '70s into developing e-LINACs for medical applications. Driven by growing interest and the trends in heavy-ion accelerator-based Nuclear Physics, the joint BARC-TIFR project MEHIA was initiated to set up the Pelletron facility, in the '80s. The facility was further augmented with the superconducting LINAC, designed and built indigenously, also as a joint BARC-TIFR project. The superconducting LINAC, a crucial sub-system of the Pelletron LINAC facility (PLF), has completed 20 years of very successful operations. This talk will outline some of the major milestones in the development of LINAC and highlight some of the critical technologies developed during the course of implementing the LINAC project. This major development was the first of its kind in the country and its relevance to future upcoming national projects will be presented.

Thursday, September 22, 2022 at 4 p.m.

Homi Bhabha Auditorium, TIFR, Mumbai*

YouTube Live: <https://youtu.be/iSkfUSQb1J4>

*Non TIFR participants must carry a photo-identity card for admission.