Indian Institutions and Fermilab Collaboration: Development of High Intensity Proton Accelerator in USA and India

Shekhar Mishra

Fermi National Accelerator Laboratory, USA

Abstract

The proposed next step in accelerators at Fermilab and at Indian DAE laboratory is to build a High Intensity Proton Accelerator (HIPA) using Superconducting Radio Frequency (SRF) technology. Indian Institutions and Fermilab are collaborating on SRF technology Research, Design and Development (RD&D) that could lead to the construction of HIPA in respective countries. This paper would discuss the present status of this collaborative RD&D and future outlook.