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Content :

The SPES Radioactive Ion Beam facility at INFN-LNL is presently in the construction phase. The facility is based on the Isol (Isotope separation on-line) method with an UCx Direct Target able to sustain a power of 10 kW. The primary proton beam is provided by a high current Cyclotron accelerator with energy of 35-70 MeV and a beam current of 0.2-0.5 mA. Neutron-rich radioactive ions are produced by proton induced Uranium fission at an expected fission rate of the order of 10^{13} fissions per second. After ionization and selection the exotic isotopes are re-accelerated by the ALPI superconducting Linac at energies of 10 AMeV for masses in the region $A = 130$. The expected secondary beam rates are of the order of $10^7 - 10^9$ pps. Aim of the SPES project is to provide a facility for high intensity radioactive ion beams for nuclear physics research as well as to develop an interdisciplinary research center based on the cyclotron proton beam.

An overview of the planned instrumentation for the SPES facility will be presented together with some examples of perspective future studies.

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