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INFRASTRUCTURES INAUGURATION OF THE SPES CYCLOTRON

The SPES (Selective Production of Exotic Species) project cyclotron was inaugurated at the Legnaro National Laboratories on 2 December.

The high-power SPES cyclotron is a circular accelerator capable of producing and accelerating protons at a rate of ten million billion of protons per second. Two proton beams will be extracted from the cyclotron: one will be used in nuclear astrophysics, the other for applications, especially in medicine, but also to study the properties of new materials, through neutrons radiation. Funds from the production of radioisotopes for clinical applications will be crucial for financing the SPES project, an aspect that will also guarantee its independence and continuity. SPES is part of a broader European project called Eurisol (European Isotope Separation On Line facility) on which European nuclear physicists are working to develop three radioactive ion beam facilities. A machine called SPIRAL2, with similar characteristics to the SPES ones, is currently being built in France and the existing ISOLDE (Isotope Separator On Line DEvice) facility at CERN is being upgraded.