

The EURISOL Project

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The scientific promises of radioactive beam research have led the European nuclear physics community to propose to study and build a next generation ISOL facility called EURISOL. A preliminary design study was conducted in the European Union 5th framework programme. The baseline design is a Multi-MW proton beam impinging on a liquid mercury converter preceding a fissile target. Spallation targets are also planned. Post-acceleration will be performed with a superconducting Heavy Ion LINAC which is designed for 100 AMeV ¹³²Sn for example.

More detailed engineering studies and prototype building are currently being carried out in the framework of the EURISOL Design Study[1], supported within the European Union 6th framework programme. Twenty-one European laboratories and institutions from twelve countries participate in this endeavour, which also includes a conceptual study for a beta-beam facility making use of the beta-decay of the large quantities of radioactive nuclei produced.

This poster will describe the baseline design of the EURISOL facility and its expected performances.

[1] see <http://www.eurisol.org>

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