

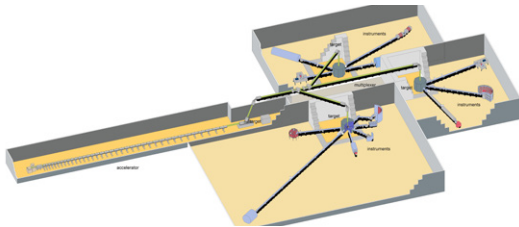
Current projects

Accelerator-based neutron sources utilize low energy neutron reactions to produce neutrons. Protons or deuterons with energies in the MeV range impinge on metal targets below the threshold of spallation. A number of European projects aim to realize powerful neutron sources on this novel technology.

— HBS at JCMS



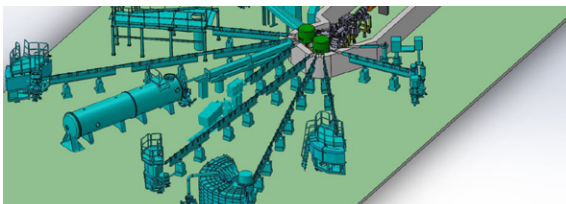
- 100 mA
- 70 MeV
- protons
- Ta target
- 3 target stations
- 18 instruments



— SONATE at LLB



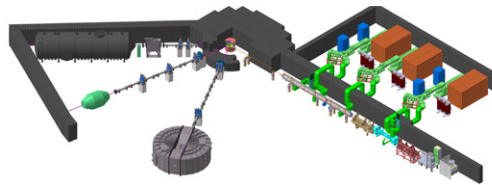
- 60 mA
- 30 MeV
- protons
- Be target
- 2 target stations
- 11 instruments



— ARGITU at ESS Bilbao



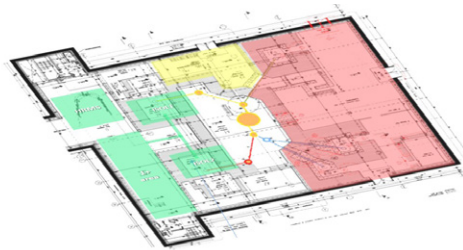
- 32 mA
- 31.5 MeV
- protons
- 1 target station
- 3 instruments



— NEPIR at LNL Legnaro



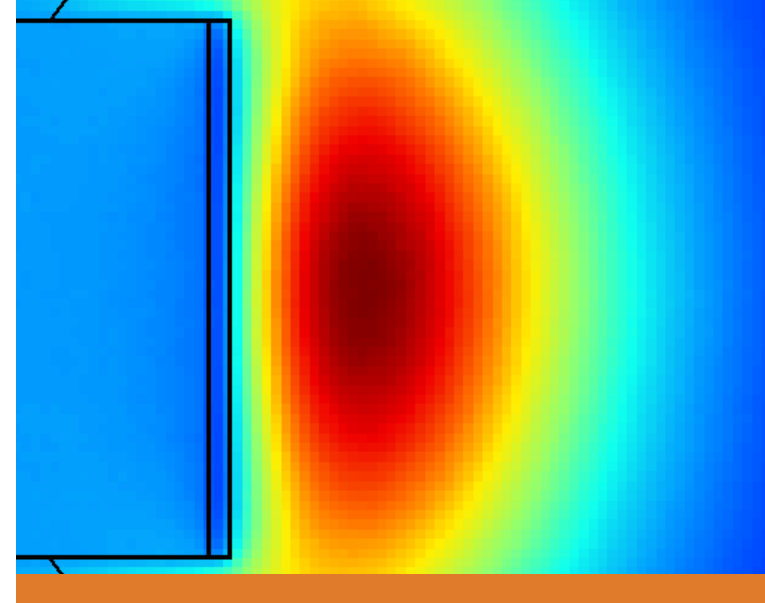
- 0.75 mA
- 70 MeV
- protons
- Be/W target
- irradiation facility



— LvB at Mirrotron

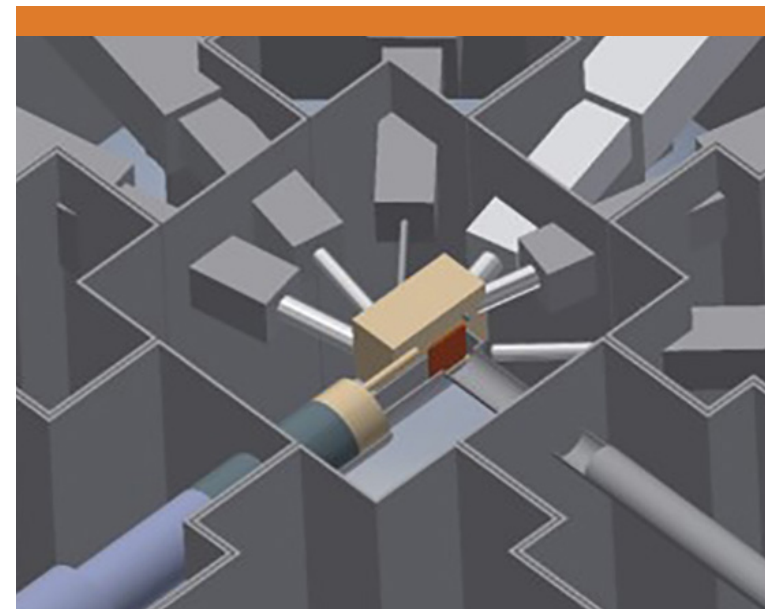


- 20 mA
- 8 MeV
- protons
- Li target
- target stations

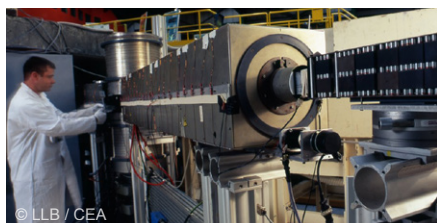


ELENA

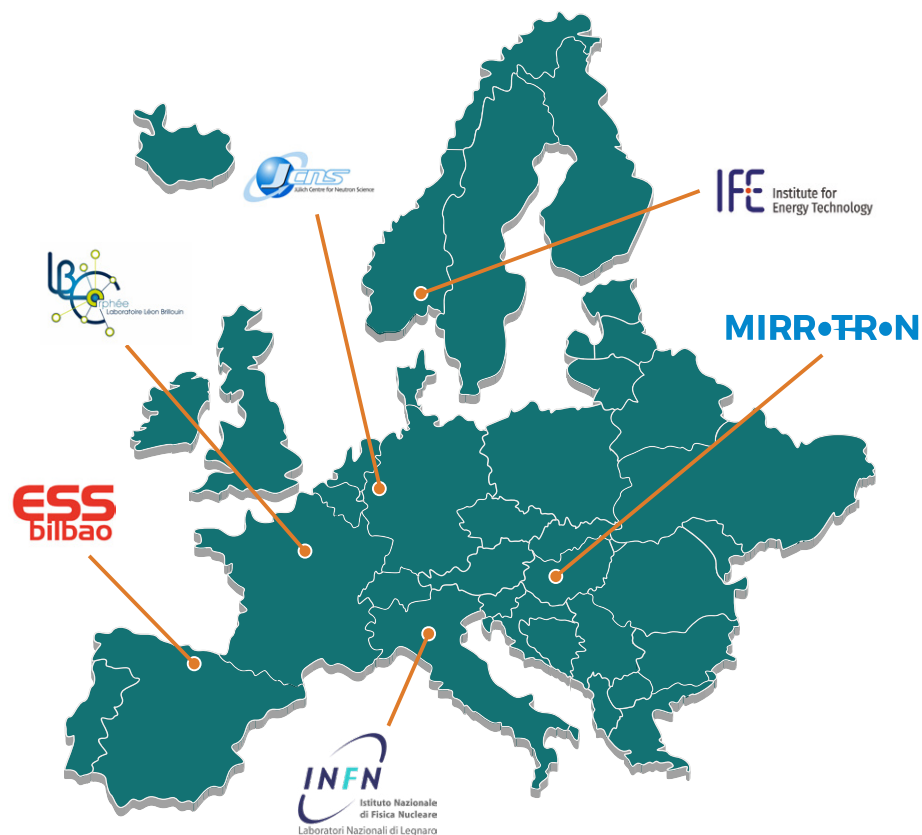
European Low Energy accelerator-based
Neutron facilities Association



- **Neutrons** see magnetism, hydrogen and atomic movements. They enable the understanding of the intimates' properties of matter leading to the development of new materials.
- **Neutrons** enable innovation and help to solve societal challenges on climate, energy conversion, health, information technology, environment or cultural heritage.



- **ELENA**, the **European Low Energy accelerator-based Neutron facilities Association**, is a not-for-profit consortium formed to promote cooperation between European laboratories, companies and researchers working in the field of low energy accelerator based neutron sources.
- **ELENA** places emphasis to cooperate and initiate collaborations, research and development on accelerator-based neutron sources within Europe.



ELENA

European Low Energy accelerator-based
Neutron facilities Association

ELENA is open to new members in Europe which engage in the field of low energy accelerator-based neutron sources.

Current* members from

ESS Bilbao
www.essbilbao.org

Institut for Energiteknikk (IFE)
www.ife.no/en/

Jülich Centre for Neutron Science (JCNS)
www.fz-juelich.de/jcns/EN

Laboratoire Léon Brillouin (LLB)
www-llb.cea.fr/en/

Laboratori Nazionali di Legnaro (LNL)
www.lnl.infn.it

Mirrotron Ltd.
www.mirrotron.com/en

*October 2020