INFRASTRUCTURES

PROTON SOURCE FOR EUROPEAN SPALLATION SOURCE (ESS) COMPLETED

At the INFN National Laboratories of the South, the construction of the proton source and of the ion beam transport line have been completed. They will move to the European Spallation Source (ESS), a large European Research Infrastructure, under construction in Lund, Sweden. Once operational, ESS will be the most powerful neutron source in the world dedicated to multidisciplinary research: from life sciences to energy, from environmental and cultural heritage technologies to fundamental physics. ESS represents one of the research projects at the international level with the highest financial investment and is supported by the participation of 17 European countries, including Italy through INFN, the National Research Council (CNR) and Elettra Sincrotrone Trieste. The construction of the source and of the transport line are the tangible signs of the international excellence now achieved by INFN laboratories in the field of accelerators. The results obtained with the European Spallation Source injector clearly exceed the project specifications and everything was accomplished within the planned timescale and in full compliance with the agreed budget. Furthermore, the growth of the Italian companies which participated in this scientific adventure was competitive at European level, a symbol of national innovation excellence.

web site: https://europeanspallationsource.se/