

[Access to CRISP Website](#)

Starting 2011, the Extreme Light Infrastructure takes part in the CRISP collaboration (The Cluster of Research Infrastructures for Synergies in Physics), the ELI-NP project being represented by the host institution, the National Institute for Physics and Nuclear Engineering (IFIN-HH) in Romania. IFIN-HH participates to the CRISP workpackages 2 (Dissemination), 12 and 14 (Detectors and DAQ).

The objective of the eleven participating Research Infrastructures (RIs) is to build up collaborations and to create long-term synergies to facilitate their implementation and enhance their efficiency and attractiveness. The CRISP proposal focuses on four R&D tasks that are of utmost importance for these RIs: (i) Accelerators, (ii) Instruments & Experiments, (iii) Detectors & Data Acquisition, and (iv) Information Technology (IT) & Data Management.

Progress in accelerator technology is essential to provide the RIs with the best possible sources of X-rays, ions and neutrons and to tackle the next challenges in nuclear and high-energy physics. Joint developments for novel experimental schemes and their related instrumentation will create new scientific opportunities at the RIs and offer tremendous potential across all fields of natural sciences. New initiatives and approaches are required to cope with the ever-increasing flow of scientific data, and a joint effort to establish the base elements of adequate platforms for the processing, storage and access to data shall be undertaken.

The RIs will exchange know-how and combine complementary expertise, ensuring cost-efficient and coherent development plans. The generated synergies will be crucial to respond to the rapidly evolving and mobile scientific user community. It will allow the RIs to strengthen their role in the advancement of knowledge and to stimulate scientific and technological progress, indispensable to address the grand challenges of our society in health, environment, sustainable energy, transport and communication. The proposed activities will be of enormous benefit as well to other large scale facilities in the European Research Area, such as regional or national light and x-ray sources, high-energy and nuclear facilities.