

MISSIONE 4
ISTRUZIONE
RICERCA

IRIS - INNOVATIVE RESEARCH INFRASTRUCTURE ON APPLIED SUPERCONDUCTIVITY



Finanziato
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NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA

Panel di riferimento: *PSE*

Titolo della Proposta: **IRIS - Innovative Research Infrastructure on applied Superconductivity**

Codice della proposta: *IR0000003*

Tipologia: **(ii) - Starting up**

Proponente: *INFN*

Infrastruttura di Ricerca: **LASA - Laboratorio Acceleratori e Superconduttività Applicata**

Importo totale: **59.996.968,15€**

Di cui al Sud: **20.379.339,31€ (33,97%)**

Abstract:

IRIS is a new infrastructure fostering innovative solutions for fundamental science and societal applications in the domain of Applied Superconductivity, with the mission to support basic research and application for improving the sustainability of large infrastructures for fundamental science, like accelerators for Particle Physics, with low consumption magnets and a green powerful transmission line. The last one, a superconducting line, will directly impact the green energy sector since it is a unique test bed for transport of large DC current at zero dissipation, a key element of an intelligent electrical network based on renewable energy. The LASA (Laboratorio Acceleratori e Superconduttività Applicata) in Segrate (Milan), managed by the INFN in a site of the University of Milan, is the hub of the IRIS infrastructure that will comprise top class facilities for serving a vast community from Italy, from Europe, and outside, both of Academia and Industry. IRIS will feature six territorial poles specialized in critical domains of Applied Superconductivity, working in full synergy: 1) Milano LASA (INFN and University of Milan), with a new advanced laboratory for superconducting magnet construction and technology development; 2) Genova (INFN and University of Genova and CNR-SPIN), with a new Laboratory for Superconducting Material and Cable; 3) Frascati (the INFN National laboratory LNF), with new Laboratory for Magnetic Measurements ; 4) Napoli (University Federico II and CNR-SPIN) with a Laboratory of innovative Diagnostics and Instrumentation for Superconducting Devices; 5) Salento University, hosting a new magnetic facility for fundamental magnetic properties, favoring the unification of the Italian community working on superconducting and magnetism 6) Salerno (INFN, University of Salerno, CNR-SPIN) hosting a new facility for Superconducting Magnets and Superconductors tests and a unique Large Current Superconducting Line test stand.

Elenco partecipanti alla Proposta:

- Consiglio Nazionale delle Ricerche
- Istituto nazionale di fisica nucleare
- Università degli Studi del Salento
- Università degli Studi di Genova
- Università degli Studi di Milano La Statale
- Università degli studi di Napoli Federico II
- Università degli Studi di Salerno