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## **IRIS - the Italian research infrastructure on Applied Superconductivity for Particle Accelerators and Societal Applications**

*Thursday 11 May 2023 16:30 (2 hours)*

The Italian Minister for University and Research has recently funded a large program for an Innovative Research infrastructure on applied Superconductivity in Italy. Based on the LASA lab in Milan it is a partnership among: INFN (leader, participating with 4 labs: Frascati, Genoa, Milan, Salerno); CNR (SPIN institute in Genoa, Naples and Salerno); five Universities: Genoa, Milan, Naples, Salento and Salerno. The infrastructure will expand and coordinate existing infrastructures, with new state of the art instruments for: 1) characterization of new superconducting wires/tapes and cables at high field and large current; 2) for implementing the construction of innovative small scale superconducting magnets or accelerator, beam lines and detectors; 3) developing advanced instrumentation and measurements for magnets and accelerators; 4) for testing large superconducting magnets and high power transmission superconducting lines; 5) for characterization of new superconducting materials and magnetism in matter. IRIS will be a key feature for participation to future projects requiring advanced superconducting technology, like FCC or the Mun-Collider, and also for developing societal applications, especially in the energy domain and the medical sector, of technologies pursued for high-energy accelerators. The paper will illustrate the IRIS project, its 3-year development and the idea to make it an open-access infrastructure.

### **Funding Agency**

### **Footnotes**

### **I have read and accept the Privacy Policy Statement**

Yes

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