

SPIN Institute Location and Contact



Department of Physical Science and Technologies of the Matter (DSFTM)

www.spin.cnr.it



Headquarters

Corso F.M. Perrone, n.24 16152 Genova, Italy

Ph. +39 010 6598 750 Fax +39 010 6506 302 e.mail segreteria@spin.cnr.it Web www.spin.cnr.it

SPIN Director Carlo Ferdeghini Deputy Director Daniele Marrè No Institute

Napoli SPIN Operative Unit C/o Dip.to di Scienze Fisiche

Complesso Universitario M. S. Angelo

Via Cintia 80126 Napoli, Italy

Deputy Director Gian Piero Pepe

Salerno SPIN Operative Unit C/o Dip.to Fisica, Università di Salerno

Via Giovanni Paolo II, 132 84084 Fisciano (SA, Italy

Deputy Director Sergio Pagano

L'Aquila SPIN Operative Unit C/o Dip.to Fisica, Università dell'Aquila

Via Vetoio, 10

Località Coppito 67100 L'Aquila, Italy

Deputy Director Silvia Picozzi

SPIN Operative Location Università di Genova Deputy Director Daniele Marrè

Università di Roma La Sapienza Università di Roma Tor Vergata Deputy Director Carmela Aruta

Physics and applications of

superconductivity and magnetic systems

oxides and other innovative functional materials

organic, hybrid and nanostructured systems

innovative devices

International Advisory Board

Agnes Barthelemy, University of Paris Sud David Larbalestier, Applied Superconductivity Center, Tallahassee, Florida Petra Rudolf, University of Groningen Alexey Ustinov, University of Karlsruhe Ruggero Vaglio, Università di Napoli Federico II Jeroen Van Den Brink, Dresden University of Technology

Mission

The mission of the Institute is the study of superconductors and of other innovative materials and of their application in the fields of electronics and energy: oxides, organic, hybrid and other complex materials exhibiting superconducting, magnetic and other properties for the development of novel nanoand micro-device concepts and prototypes.



Relationship

By following the trend firmly established in the last years at an international level the original SPIN expertise in superconductivity and high-Tc superconductor oxides has gradually evolved by shifting emphasis towards novel advanced materials. A strong push was given in the last decade to research in fields such as multifunctional oxides, organic and hybrid materials, and nanostructured systems. Analogous trends can be indeed observed in important European, US and Japanese laboratories (Argonne National Laboratory, Illinois; Applied Superconductivity Center, Tallahassee, Florida; Pennsylvania State University; ISIR, Osaka; Tsukuba University and many others).

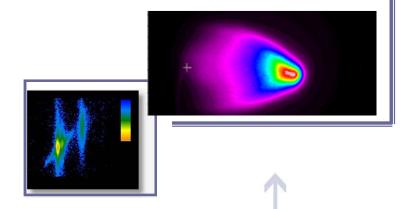
A relevant characteristic of the Institute is the extensive use of linear, nonlinear and ultrafast laser techniques for materials synthesis and characterization. This very successful approach provides added value to the research in the SPIN fields of study.

Industrial Collaborations and Technology Transfer

The scientific and technological research activities carried out by the SPIN laboratories have a wide and strong impact on industrial interests and technology transfer initiatives.

The spin-off company Columbus Superconductor SPA is a successful example coming from the fruitful research collaboration with ASG Superconductors SPA for the production and the commercialization of innovative MgB2 superconducting wires.

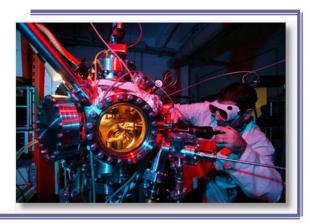
One in the main technology transfer initiatives is participation to the Regional Competence Centre in Campania *New Technologies for productive activities* (Naples and Salerno Units) that represents an important and effective connection with the local industrial issue.



Personnel

The Institute assembles a team of 60 CNR staff researchers, 80 Associated University professors, 15 employees working in administration and general services, and a good number of post-docs and PhD students (about 40 at this stage).

Training and education at undergraduate and PhD level are carried out in close collaboration with the Universities hosting the local SPIN Units.



Facilities

SPIN is endowed with an impressive set of advanced scientific instruments, including nearly 20 thin film deposition systems, 3 clean rooms, 3 high-field and-low temperature STM systems, numerous laser sources emitting from IR to UV and ranging from CW mode to femtosecond pulses, and numerous other equipment. The scientific research is supported by well-equipped electronic and mechanical workshops, library, www, email, network-storage services and GRID computing.



Budget

The Institute overall institutional budget is on the order of 4 million € per year (including the employee payroll) and a further budget on the order of 2 million € per year is expected through participation in competitive research calls (projects funded at regional, national and European level).

