CENTRO NAST
about 100 Researchers

Departments of Physics, Chemistry, Biology, Engineering, Medicine, of Rome "Tor Vergata"

Researchers also from Other Universities, CNR, CNISM, ENEA, INFN

- NAST is NEW!
- Born in december 2006
- Web address: www.centronast.it

The NAST activity includes

- 3 Research Projects
- and
- Theory

Research Project on NANOMATERIALS coordinated by Fulvia Patella

- Optics of Clean and Functionalized surfaces (Chiaradia, Goletti)
- Micro Raman Spectroscopy of Nanostructures (Richter)
- Organic thin films (Venanzi, Stella)
- Semiconductor Quantum Dots (Balzarotti + Patella)
- Carbon Nanostructures (Morales)
- Superconductors (Balestrino)
- Application to fuel cells (Licoccia)

Research Project on BIOMATERIALS coordinated by Nicola Rosato

- Nanoparticles as cellular nanoprobes (Rosato)
- Health impact of Nanostructures (Magrini)
- Tissue engineering (Di Nardo)
- Stem cell tissue engineering (Traversa, Gambacurta)

Research Project on ADVANCED INSTRUMENTATION coordinated by Piergiorgio Picozza

- New instruments for neutron spectroscopy, application to cultural heritage (Andreani, Albertano)
- Free Electron Laser feasibility (Catani)
- Design of high reliability electronic components (Salsano)
- Application of new materials and components to Astroparticle Physics (Picozza)
- Applications to Nuclear Medicine (Schillaci)

THEORETICAL RESEARCH coordinated by Rodolfo Del Sole

- Ab initio theory of optical properties (Del Sole)
- Biomolecules (Guidoni)
- Transport in Carbon Nanotubes (Cini)
- Light-matter interaction, polariton laser (Kavokin)
- Superconductivity (Cini, Varlamov)
- Structure of polymers, DNA bases, proteins… (Desideri, Morante, Palleschi)