

# Physics Area @ SISSA

SISSA Welcome Day, November 23<sup>th</sup>, 2011

# The Area of Physics

- People: about 200, 60% PhD students, 20% post-docs, 20% staff, 30% from abroad
- Training: PhD courses until Spring, and selection of your research line and supervisor
- 3+1 years for carrying out original research, within small or large international collaborations, to grow as a junior researcher in a world-wide context, get a prestigious Post-Doc position

# Research and Training

- **Astrophysics:** High Energy and Relativistic Astrophysics, Stars and Galaxies, Large Scale Structure in Cosmology, Early Universe, Gravitation Theory. PhD courses in Astrophysics and Astroparticle
- **Condensed Matter:** Computer Modeling of Molecular, Condensed Matter and Nano-Structured Systems, Physics of Strongly Correlated Quantum Systems, Lattice Models, Quantum Computation, Cold Atoms, Complex and Disordered Quantum Systems, Associative Memories. PhD courses in Condensed Matters and Statistical Physics
- **High Energy:** Physics Beyond the Standard Model of Particle Physics (LHC, flavour, neutrinos), String Theory, Statistical Field Theory, Non-Equilibrium Statistical Physics. PhD courses in Astroparticle, High Energy and Statistical Physics
- **Statistical and Biological Physics:** Dense Phases of Biopolymers, Structure Function Relationship in Enzymes, Rare Events in Biological Systems, Molecular Mechanisms of Diseases and Drugs, Enzymatic and Biomimetic Catalysis, Small Ribonucleic Acid, PLUMED

# Web Pages

- Astroparticle: [sissa.it/app](http://sissa.it/app)
- Astrophysics: [sissa.it/ap](http://sissa.it/ap)
- Condensed Matter: [sissa.it/cm](http://sissa.it/cm)
- High Energy: [sissa.it/he](http://sissa.it/he)
- Statistical Physics: [sissa.it/statistical](http://sissa.it/statistical)
- Statistical and Biological Physics: [sissa.it/sbp](http://sissa.it/sbp)