

## CALL FOR POSTDOCTORAL FELLOWSHIPS

The Gran Sasso Science Institute (GSSI) offers 18 positions for research activity in the fields of the Institute: Physics, Mathematics, Computer Science, Sociale Sciences.

Applicants must hold a PhD degree or an equivalent qualification. There is no age limit for applicants.

The annual gross salary is € 36.000,00.

Each research grant is for two years.

Research topics:

1. Physics:
  - 5 positions in the following field: Astroparticle Physics, physics of deep underground laboratories (neutrino physics, direct dark matter searches, nuclear astrophysics) and studies of cosmic radiation (cosmic rays, gamma rays, gravitational waves and astrophysical neutrinos).
2. Mathematics:
3. - 5 positions in the following fields: Stochastic Differential Equations. Particles systems and macroscopic limits, statistical mechanics and phase transitions. Probabilistic and Statistical methods in Big Data problems. Nonlinear dispersive PDEs. Quantum many body problems. Dynamical Systems. Dynamics and Control on Networks. Mathematical models of collective behaviour, in biology and social sciences. Mathematical theory in classical and nonclassical fluids, Mathematical problems in Turbulence. Mathematical Models in continuum mechanics of solids, fluids and biological matter. Numerical methods in Linear Algebra and PDEs.
4. Computer Science:
  - 5 positions in the following fields: Algorithmic aspects of social and computer networks including (but not limited to) distributed systems, optimization, game theory, analysis of complex networks, and algorithm engineering; Software systems and services, with emphasis on model-based approaches to support their development at different stages: design, testing, implementation, evaluation and maintenance; Specification and analysis of concurrent reactive systems, with emphasis on languages and models for describing such systems, specification formalisms such as temporal logics, and algorithms and tools for computer-aided verification.
4. Social Sciences:
  - 3 positions in "Urban Studies and Regional Science". We welcome applications in particular (but not only) from researchers in the fields of applied economics, economic geography and urban planning. The positions are intended for research activity on the main research themes of the GSSI Social Sciences research unit.

A very good knowledge of English is required.

The applications must be sent to GSSI only by filling out the online application form at [www.gssi.it/postdoc/](http://www.gssi.it/postdoc/)

The application must include:

- a curriculum vitae
- a research statement
- max 3 publications (PhD thesis may be included)
- id document

Eligible candidates in Mathematics must have earned their PhD not earlier than January 1st, 2014.

**Deadline: March 2, 2018, h. 6 p.m. (italian time zone).**