



UNIVERSITÀ
DEGLI STUDI
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ALMA
UNIVERSITAS
TAURINENSIS

Dipartimento di Fisica

Via P. Giuria, 1

10125 Torino, Italy

Dr Stefano Camera

Rita Levi Montalcini Assistant Professor

Tel.: +39 011 670 7440

E-mail: stefano.camera@unito.it

URL: www.ph.unito.it/~camera

Open call for 1 PhD studentship in Cosmology

The University of (Italy) announces the opening of a call for No. 1 PhD studentship for **non-Italian applicants**, to work under the supervision of Dr S. Camera (Phys. Dept.) on his PROMETHEUS project.

Title

Particle cosmology with multi-wavelength synergies

Abstract

Focus of this project is the development of novel synergies between cosmological and/or astrophysical observables across the electromagnetic spectrum to study the underlying particle physics of the known and unknown constituents of the Universe, such as neutrinos, dark matter/energy and the inflaton. This research covers both data analysis and forecasting with numerical simulations for available and oncoming data sets, with a focus on the development of numerical methods to estimate the observational signals. **The successful candidate will have the unique opportunity of working within large international collaborations, like the Square Kilometre Array or the European Space Agency's Euclid satellite.**

Duration & salary

The **nominal duration** of the studentship is **3 years** and the net salary amounts to €12,127.20 p.a. (plus a €2400.00 1st-year bonus from the Physics Department). Starting date is expected in October 2017. **Research budget** for travel and other expenses **will be provided. No teaching or other duties are required** for this position. Standard benefits of Italian contracts for graduate student fellowships will apply.

Studying & living in Turin

The Department of Physics, located in the city centre in front of the beautiful Parco del Valentino and its Borgo Medievale, on the shores of river Po, is one of the largest Physics Departments in Italy and is ranked 2nd in Italy (Nature Index 2016 Rising Stars) and within the first 150 best Physics research institutes in the world. The successful candidate, whilst working on PROMETHEUS, will also have the opportunity to be in close contact and collaboration with: the CAUSTIC group, whose interests cover large-scale cosmic structure and alternative cosmological models & theories of gravity; and the Theoretical Astroparticle & Neutrino Physics group, investigating particles in cosmology and astrophysics, dark matter, the early Universe, and neutrino physics and astrophysics.

Established in 1404 and located in North-West Italy, close to the Alps, the University of Turin (UniT) is one of the country's largest, oldest and most prestigious universities. UniT provides quality higher education and research opportunities, with many of its graduates having achieved international renown. UniT has a long list of illustrious alumni, including 3 Nobel Prize laureates, Prime Ministers, Presidents of the Republic, and prominent lawyers, philosophers, writers and physicists such as Avogadro, Lagrange, Cauchy, Wick, Wataghin, Regge.

Contacts

Feel free to contact stefano.camera@unito.it for any question related to the position.