

Trieste

Trieste is a charming Italian city in the North-East part of the country, near the boundary with Slovenia, facing the Adriatic sea. It is a unique melting pot, where the Italian, Austro-Hungarian and Balcanic culture coexist since centuries, notwithstanding the dramatic events of the XIX century. It is known in Italy for the very high quality of life among Italian cities, with a rich cultural life (http://www.turismofvg.it/en-US/top_events_triesteen.html).

The natural environment is catching, and the city is deeply interlaced with “Carso”, a peculiar countryside giving the name to carsic phenomena, and with a spectacular coast on the Adriatic sea.



Biking, sailing and trekking are quite popular. Every year, over two thousands boats participate in one of the largest sailing race in the world, the “Barcolana”.



Enroll!

Applicants are selected through a written and oral examination. The written tests of the past years are available on the sector’s page www.sissa.it/mp/admission.

Non EU applicants are given the possibility of an early selection on the basis of publications and references.

Applications must be submitted online at , and completed subsequently by fax; the deadline for 2010-2011 is **July, 8**:

General informations about applications (including announcements and requirements) as well as the online form can be found at

<http://www.sissa.it/applications>

For enquiries, email phd@sisssa.it

Mathematical Physics & Geometry at SISSA

Join us for postgraduate training and a cutting-edge research experience at SISSA, the International School for Advanced Studies of Trieste! Here you will experience the atmosphere of a large international scientific community.



PhD Curricula

Our Mathematical Physics Sector runs two PhD curricula: Mathematical Physics and Geometry. Courses are given both by permanent staff and invited lecturers, selected among leading international experts.

Students are offered full financial support and travel money to attend workshops and schools, so to establish international contacts and collaborations.



Our intensive training program is concentrated on the first two years, so to give students the opportunity to develop independent research of the highest academic standard, during the full four year programme. Lectures are given in English.



There are no teaching duties for the PhD students. Instead, they are invited to participate in the Sector's seminar activity, both to present their research and to organise reading seminars.

Research

Most of the staff members' research requires a strong interplay between mathematics and physics and involves topics which are now attracting much interest in the international community. The main lines of research are:

- **Integrable systems, Frobenius manifolds and nonlinear waves**
- **Algebraic geometry**
- **Quantum groups and noncommutative geometry**
- **Mathematical methods of Quantum mechanics**
- **Mathematical aspects of Quantum Field Theory and String Theory**

The Campus

- **Financial Mathematics**

2010 was a special year for SISSA: this young and dynamic institution is constantly growing and, for the second time in its life, had to move to a new larger location, the Santorio building. This huge building now hosts all the sectors of SISSA in one place.



The long standing connection with our former neighbour, the Abdus Salam International Centre for Theoretical Physics (ICTP), is now ensured by a minibus running every two hours between the two institutions.

Besides the standard facilities (Library, Cam-teen, Kindergarden,...), a Gym will soon be available. Walking through the beautiful park, one may enjoy the beauty of the rich nature of the coast, at the boundary with Carso.