



Istituto Nazionale  
di Fisica Nucleare  
Sezione di Trieste

# Theoretical and experimental aspects of the spin-statistics connection and related symmetries

Trieste, Italy - 21st-25th October 2008 - Stazione Marittima Conference Center

## Theoretical and experimental aspects of the spin-statistics connection and related symmetries (Spin-Stat2008)

Trieste, Italy, 21 - 25 October 2008

### First Circular

The workshop will focus on the spin-statistics connection and related symmetries both from the experimental and from the theoretical points of view.

These topics are important in all areas of physics, in much of chemistry, and also in the philosophy of science. The workshop will bring together experimentalists, theorists, and philosophers to survey work done during the past years that challenges the traditional views of these issues. The workshop will also explore connections with rapidly developing fields such as other fundamental symmetries, supersymmetry and quantum gravity.

The workshop is organized in plenary sessions of invited, review and contributed talks, and poster presentations.

The proceedings of this workshop will be published.

### The list of topics includes:

- Spin-statistics theorem and the Pauli Exclusion Principle (PEP)
- Theories including small spin-statistics connection violation:
  - parastatistics
  - quon-theory
  - PEP and hidden dimensions
  - the spin-statistics connection in the framework of quantum gravity
- Experimental methods and tests of spin-statistics connection in atomic, nuclear and particle physics:
  - Spin-statistics violation and its relation to other fundamental symmetries (CPT, Lorentz), supersymmetry, string theory
  - Spin-statistics and noncommutative geometry
  - Spin-statistics and astrophysical implications
- Next-generation experiments
- Foundations of quantum mechanics
- Philosophical interpretations



The Workshop site will be the Stazione Marittima Congress Centre, in the centre of Trieste, directly on the seafront.

The workshop fee is 370 €; if paid by August 20th, a reduced fee of 300 € applies. The fee includes registration, coffee breaks, lunches, social programme of the participant and the social dinner.

A limited number of support grants will be available especially for young scientists.

**The important dates and deadlines are:**

**April 15, 2008**

- Abstract submission, opening

**May 12, 2008**

- Registration and hotel reservation, opening

**June 25, 2008**

- Deadline for the abstract submission
- Deadline for the request of support

**July 15, 2008**

- Paper acceptance
- Citizens of some countries may need a formal invitation letter to obtain the entrance visa; see the list of countries here: <http://www.esteri.it/MAE/EN/Ministero/Servizi/Stranieri/ServReteConsolare.htm>.  
On request, we can send you the invitation letter: please respect this deadline date.

**August 20, 2008**

- Deadline for registration and fee payment at reduced rate
- Deadline for hotel booking at preferential rates

**September 15, 2008**

- Finalization of the scientific programme

**For further information:**

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www: <http://www.ts.infn.it/spinstat2008/>

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