

# MCQM20 mathematical Challenges in Quantum Mechanics

## Third School and Workshop

Como, Italy - June 8 - 13, 2020

### Courses

**Charles Fefferman** (Princeton University) & **Michael I. Weinstein** (Columbia University)

Continuum Models of Graphene and Analogous Materials

**Ari Laptev** (Imperial College London)

Spectral Theory and its Applications

**Eric Séré** (Université Paris-Dauphine)

A Rigorous Approach to some Nonlinear Models from Relativistic Quantum Mechanics

### Aim and Scopes

The aim of the meeting is to present the state of the art in some challenging open problems in Quantum Mechanics from the point of view of Mathematical Physics. It is addressed to young people interested in working on the subject but also to experienced researchers willing to exchange the newest ideas and methods in the field. Among the topics covered: spectral and scattering theory for Schrödinger operators, effective behavior in many particles quantum systems, Bose-Einstein condensation, nonlinear Schrödinger equation, numerical analysis of quantum systems, quantum graphs.

### Deadlines

Request for financial support: **February** 28, 2020

Request for poster/contributed talk presentation: **March** 31, 2020

Registration: **April** 30, 2020

### Plenary Talks

**Eric Carlen** (Rutgers University)

**Nicolas Gisin** (Université de Genève)

**Stephane Nonnénmacher** (Université Paris-Sud)

**Marcello Porta** (Universität Tübingen)

**Robert Seiringer** (IST Austria)

**Simone Warzel** (Technische Universität München)

**Organizing Committee** C.Cacciapuoti (Uninsubria), R. Carlone (Federico II), D. Noja (Bicocca), A. Posilicano (Uninsubria)

**Scientific Committee** R.Adami (Politecnico Torino), M. Correggi (SNS), G. Dell'Antonio (SISSA), R. Figari (INFN), D. Finco (Uninettuno), G. Panati (Sapienza), A. Teta (Sapienza)



**For more informations**

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