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# **EDITORIAL**

# Nobel Symposium 148: Graphene and Quantum Matter

## **Guest Editors**

#### Antti Niemi

Department of Physics and Astronomy, Uppsala University, P O Box 803, S-75108, Uppsala, Sweden and Laboratoire de Mathematiques et Physique Theorique CNRS UMR 6083, Fédération Denis Poisson, Université de Tours, Parc de Grandmont, F37200 Tours, France

#### Frank Wilczek

Center for Theoretical Physics and Department of Physics, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

# **Eddy Ardonne**

Nordita, Roslagstullsbacken 23, SE-106 91 Stockholm, Sweden

## **Hans Hansson**

Department of Physics, Stockholm University, AlbaNova University Center, SE-106 91 Stockholm, Sweden The 2010 Nobel Symposium on Graphene and Quantum Matter, was held at the Grand Hotel in Saltsjöbaden south of Stockholm on 27–31 May. The main theme of the meeting was graphene, and the symposium turned out to be very timely: two of the participants, Andre Geim and Kanstantin Novoselov returned to Stockholm less then six months later to receive the 2010 Nobel Prize in Physics. In these proceedings leading experts give up-to-date, historical, experimental, theoretical and technological perspectives on the remarkable material graphene, and several papers also make connections to other states of quantum matter.

Saltsjöbaden is beautifully situated in the inner archipelago of Stockholm. It provided a pleasant setting for the talks and the ensuing discussions that took place in an enthusiastic and friendly atmosphere. The social programme included a boat trip in the light summer night and a dinner at the renowned Grand Hotel.

These proceedings are ordered thematically, starting with historical overviews, followed by first experimental and then theoretical papers on the physics of graphene. Next are several papers addressing more general topics in quantum matter and finally contributions on the technological applications of graphene.

We hope that this volume will serve as a source of knowledge and inspiration for any physicist interested in graphene, and at the same time provide a snapshot of a young field of research that is developing at very high speed.

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