

13th Workshop on Quantum Information Processing

QIP 2010



15th - 22nd Jan
Zürich
Switzerland

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zürich

QSIT

PAULI CENTER
for Theoretical Studies

FNSNF

SCHWEIZERISCHER NATIONALFONDS
ZUR FÖRDERUNG DER WISSENSCHAFTLICHEN FORSCHUNG

Tutorial programme: 15th - 17th Jan
Conference: 18th - 22nd Jan

www.qip2010.ethz.ch

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QIP 2010 is the thirteenth workshop on theoretical aspects of quantum computing, quantum cryptography, and quantum information theory in a series that started in Aarhus in 1998 and was held last year in Santa Fe.

TUTORIAL PROGRAMME

15th – 17th January 2010

Four invited tutorial lectures:

Ignacio Cirac (MPQ, Garching)
Classical simulation of many-body quantum systems

Jiannis Pachos (University of Leeds)
Why should anyone care about computing with anyons?

Pawel Horodecki (Gdansk University of Technology)
Additivity of channel capacities

Daniel Nagaj (Slovak Academy of Sciences)
Local Hamiltonians in quantum computation

Graeme Smith (IBM, Watson)
Regularization and its discontents

CONFERENCE

18th – 22nd January 2010

Approximately forty talks, including invited speakers:

Scott Aaronson (MIT)

André Chailloux (Université de Paris-Sud)

Philippe Corboz (University of Queensland)

Aram Harrow (University of Bristol)

Rahul Jain (National University of Singapore)

Julia Kempe (Tel-Aviv University)

Ben Reichardt (University of Waterloo)

Umesh Vazirani (UC Berkeley)

RUMP SESSION

Evening of 20th January 2010

Informal session (2-3 hours) chaired by Louis Salvail (University of Montreal), with food and drinks provided.

Short presentations (2-10 min) on recent results, work in progress and other topics of interest to the QIP community.

Non-technical and humorous presentations are encouraged.

Submissions are possible during the conference.



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich



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Scott Aaronson (MIT)

David Bacon (University of Washington)

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Matthias Christandl (LMU Munich)

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Andrew Doherty (University of Queensland)

Aram W. Harrow (University of Bristol)

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Barbara Terhal (IBM Watson)

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Ronald de Wolf (CWI, Amsterdam)

Local Organizing Committee

Johan Åberg (*tutorial programme*), Ilona Blatter (*webmaster*), Roger Colbeck (*poster session*), Oscar Dahlsten (*publicity*), Matthias Fitz (i>rump session), Viktor Galliard (*tech support*), Esther Hänggi (*excursion*), Renato Renner (*chair*), Lídia del Rio (*poster*), Stefan Wolf (*local arrangements / sponsors*).