Frontiers in Geometry and Topology Research Conference

8 - 12 August 2022 An ICTP Hybrid Meeting Trieste, Italy

Organised in partnership with the Clay Mathematics Institute.

The conference is intended as an appreciation of the contributions of Tomasz Mrowka

Geometry and Topology have seen spectacular recent developments, including the solution of classical problems. As a consequence, the established picture of how various parts of these areas fit together is evolving rapidly. On the topological side, among the topics that have progressed are: four-manifolds obtained as knot traces; knot concordance and homology cobordism, Stein fillings. On the Floer homology side, we have powerful new computational methods and new invariants of embedded graphs and webs.

On the more analytic side, we have new compactness results and potential new invariants.

Topics:

- Interplay of 3-dimensional and 4-dimensional Topology;
- Floer homology theories and associated invariants;
- Khovanov homology;
- Geometric and analytic aspects of gauge theoretic equations.

Further information: http://indico.ictp.it/event/9706/ smr3649@ictp.it

Directors:

P. FEEHAN, Rutgers University, USA L. NG, Duke University, USA P. OZSVATH, Princeton University, USA Y. RUAN, Zhejiang University, China P. SEIDEL, MIT, USA

Local Organiser:

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Speakers:

D. GABAI, Princeton University, USA L. GOETTSCHE, ICTP, Italy L. GUTH, MIT, USA J. HOM, Georgia Tech, USA C. HUGELMEYER, Princeton University, USA *P. KRONHEIMER, Harvard University, USA F. LIN, Princeton University, USA **R. LIPSHITZ, University of Oregon, USA** P. LISCA, Università di Pisa, Italy C. MANOLESCU, Stanford University, USA G. MATIC, University of Georgia, USA **R. MAZZEO, Stanford University, USA** M. MILLER, Stanford University, USA E. MURPHY, Princeton University, USA *J. PARDON, Princeton University, USA L. PICCIRILLO, MIT, USA J. PINZON CAICEDO, University of Notre Dame, USA J. RASMUSSEN, Cambridge, UK D. RUBERMAN, Brandeis University, USA A. STIPSICZ, Central European University, Hungary Z. SZABO, Princeton University, USA

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*To be confirmed

Deadline:

28 February 2022

How to apply:

Online application: http://indico.ictp.it/event/9706/

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.







Trieste, Ital

The Abdus Salam International Centre for Theoretical Physics

