

International Centre for Theoretical Physics South American Institute for Fundamental Research

WORKSHOP ON QUANTUM SYMMETRIES

October 16-18, 2019

at Instituto de Física Teórica - UNESP, São Paulo, Brazil

LECTURERS

Nicolás Andruskiewitsch (U. Nacional de Cordoba, Argentina)

Yuly Billig (Carleton U., Canada)

Jethro van Ekeren (U. Federal Fluminense, Brazil)

Stephen Griffeth (U. de Talca, Chile)

Reimundo Heluani (IMPA, Brazil)

Sonia Natale (U. Nacional de Cordoba, Argentina)

Julia Pevtsova* (U. of Washington, USA)

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*to be confirmed

Symmetry in nature and in mathematics may be encoded by groups of symmetry operations, or more generally by the action of Hopf algebras (quantum symmetry). Several powerful tools are used for understanding these actions, such as Lie theory, group theory, tensor categories, fusion categories, and cohomology. The areas to which these ideas apply range from such classical subjects as geometry, combinatorics and algebra to quantum computations, vertex algebras and conformal field theories.

Despite the growing number of people working on quantum symmetries in these different areas and a reasonable number of conferences in the respective areas, the cross-pollination of these different subjects at a single conference is rare and the communities interested in quantum symmetries for different reasons do not have substantial overlap.

The goal of this workshop is to bring together specialists and young mathematicians specializing in these areas to develop newly emerging connections and foster communication and sharing of ideas. This event will consist of research and panoramic talks related to several subject areas united by their applications to quantum symmetries.

There is no registration fee.

Registration deadline: August 18, 2019

Online registration form and information: http://www.ictp-saifr.org/mathphys19



ORGANIZERS

Iván Angiono (U. Nacional de Cordoba, Argentina) Vyacheslav Futorny (U. de Sao Paulo, Brasil) Andrea Solotar (U. de Buenos Aires, Argentina) Leandro Vendramin (U. de Buenos Aires, Argentina) ICTP-SAIFR STEERING COMMITTEE Fernando Quevedo (chair) - ICTP director Sandro Valentini - UNESP rector Carlos Brito Cruz - FAPESP scientific director Luiz Davidovich - Brazil Acad. Science president Juan Maldacena - Representing South America ICTP-SAIFR SCIENTIFIC COUNCIL Peter Goddard (chair) - IAS, Princeton Rosario Fazio - ICTP representative Marcelo Yamashita - IFT-UNESP director Marcel Clerc - U. de Chile André de Gouvêa - Northwestern U. Eduardo Fradkin - U. Illinois Gabriela Gonzalez - LIGO, Louisiana State U. Belita Koiller - UFRJ, Rio de Janeiro Luis Lehner - Perimeter I., Waterloo Gabriel Mindlin - U. de Buenos Aires ICTP-SAIFR STAFF Nathan Berkovits - Director Rogerio Rosenfeld - Vice director Pedro Vieira - Perimeter-SAIFR Coordinator Jandira Oliveira - Executive manager Humberto Neto - Executive secretary Lucas Sanches - Computer systems manager Lucas David - Outreach Coordinator Ana Luiza Serio - Outreach Coordinator Lilia Faria - Financial Manager Malena Stariolo - Science Journalist Isabela Pereira - Technical assistant