

June 17-21, 2013 - SISSA

Hilbert schemes of points are a traditional field of interest for algebraic geometers. Work by Nakajima and others established a relation between their geometry and the representation theory of Heisenberg-Clifford algebras.

More recent research connected Hilbert schemes with other infinite-dimensional algebras, such as Cherednik algebras, quantum Heisenberg algebras, Kac-Moody algebras, and so on. This conference aimed at providing an updated survey of the state of the art in this area of research in its various aspects.

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Topics:

- categorification of the (quantized) Heisenberg algebra
- Cherednik algebras, W-algebras
- Ding-Iohara algebras, shuffle algebras
- moduli spaces of instantons and framed sheaves
- instanton counting, Alday-Gaiotto-Tachikawa conjecture
- instanton counting with surface operators, moduli spaces of parabolic framed sheaves
- moduli spaces of quiver representations, wall-crossing formulas

Speakers:

Sabin Cautis (University of Southern California), **Duiliu Emanuel Diaconescu** (Rutgers University),

hael Finkelberg

(IMU, IITP and State University High School of Economics, Moscow),

Mic

Iain Gordon

(University of Edinburgh),

Lothar Göttsche

(ICTP, Trieste),

Martijn Kool

(Imperial College, London),

Marcos Jardim

(Universidade Estadual de Campinas),

Andrei Negut

(Harvard University),

Jørgen Vold Rennemo

(Imperial College, London),

Leonid Rybnikov

(IITP and State University High School of Economics, Moscow),

Alistair Savage

(University of Ottawa)

Committees:

Scientific Committee: Peter Newstead (Chair), Usha Bhosle, Steven Bradlow, Leticia Brambila-Paz, Ugo Bruzzo, Carlos Florentino, Oscar Garcia-Prada, Peter Gothen, Daniel Hernandez Ruiperez, Alastair King, Herbert Lange, Antony Maciocia, Ignasi Mundet i Riera, Christian Pauly, Alexander Schmitt, Andras Szenes.

Organizing Committee: Ugo Bruzzo (SISSA), Alessio Lo Giudice (SISSA), Mattia Pedrini (SISSA), Francesco Sala (Heriot-Watt University at Edinburgh), Alessandro Tanzini (SISSA).

Deadlines:

- Deadline for asking for financial support: **March 31, 2013**
Support for lodging will be available for some participants, in particular Ph.D. students and young Post-docs.
- Deadline for registering to the conference: **April 30, 2013**

INFO:

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