



The 21st Midrasha in Mathematicae Lie Theory without Groups: Enumerative Geometry and Quantization of Symplectic Resolutions

January 7 - January 12, 2018

General Director: Peter Sarnak

Organizers:

Andrei Okounkov (Columbia University)

David Kazhdan (The Hebrew University)

Roman Bezrukavnikov (Massachusetts Institute of Technology)

Scientific Program and Social Events

Sunday, January 7

09:00- 09:30 Registration & coffee (IIAS Lobby)

09:30 - 10:30 **Roman Bezrukavnikov** Canonical Bases and Geometry

11:00 - 12:00 **Ivan Loseu** Quantizations of Nakajima Varieties

12:00 - 14:00 Lunch (Belgium House)

14:00 - 15:00 **Davesh Maulik** Representation Theory and Enumerative Geometry

15:00- 15:30 Coffee break

15:30 - 16:30 **Alexander Braverman** Super-symmetric quantum field theories in 3d, the affine Grassmannian and symplectic duality

17:00 -19:00 Opening Reception

Monday, January 8

09:00- 09:30 Coffee (IIAS Lobby)

09:30 - 10:30 **Davesh Maulik** Representation Theory and Enumerative Geometry

10:30- 11:00 Coffee break

11:00 - 12:00 **Ivan Loseu** Quantizations of Nakajima Varieties

12:00 - 14:00 Lunch (Ha'Ivrit)

14:00 - 15:00 **Jake Solomon** -holomorphic Curves with I-holomorphic Lagrangian Boundary Conditions

15:00- 15:30 Coffee break

15:30 - 16:30 **Alexander Braverman** Super- symmetric quantum field theories in 3d, the affine Grassmannian and symplectic duality

Tuesday, January 9

09:00 - 09:30 Coffee (IIAS Lobby)

09:30 - 10:30 **Ivan Loseu** Quantizations of Nakajima Varieties

10:30- 11:00 Coffee break

- 11:00 - 12:00 **Davesh Maulik** Representation Theory and Enumerative Geometry
- 12:00 - 14:00 Lunch (Ha'lvrit)
- 14:00 - 15:00 **Jake Solomon** J-holomorphic Curves with I-holomorphic Lagrangian Boundary Conditions
- 15:30-16:30 **Alexander Goncharov** Cluster polylogarithms and Zagier's conjecture on $\zeta(4)$

Wednesday, January 10

- 08:30 - 09:00 Gathering & coffee (IIAS Lobby)
- 09:00 - 10:00 **Dennis Gaitsgory** Metaplectic Whittaker category and quantum groups
- 10:00 - 10:30 Coffee break
- 10:30 - 11:30 **Andrei Okounkov** Representation Theory and Enumerative Geometry
- 12:00 - 13:00 **Alexander Goncharov** Cluster polylogarithms and Zagier's conjecture on $\zeta(4)$
- 13:00 - 14:00 Lunch (Belgium House)
- 14:30 -18:30 Tour to the Old City of Jerusalem

Thursday, January 11

- 08:30 - 09:00 Gathering & coffee (IIAS Lobby)
- 09:00 - 10:00 **Andrei Okounkov** Representation Theory and Enumerative Geometry
- 10:15 - 11:15 **Roman Bezrukavnikov** Canonical Bases and Geometry
- 11:30- 12:30 **Anton Kapustin** Branes and quantizations
- 12:45 - 14:15 Lunch (Belgium House)
- 14:30 - 16:30 **Andrei Okounkov** Catching monodromy, Colloquium at the Math Department
([Mathematics Building](#), Lecture Hall #2)

Friday, January 12

- 08:30 - 09:00 Gathering & coffee (IIAS Lobby)
- 09:00 - 10:00 **Roman Bezrukavnikov** Canonical Bases and Geometry
- 10:00- 10:30 Coffee break
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10:30 - 11:30 **Andrei Okounkov** Representation Theory and Enumerative Geometry

11:30- 12:00 Coffee break

12:00 - 13:00 **Anton Kapustin** Branes and quantizations

13:00- 14:00 Light lunch at IAS

