

GEOMETRY OF DERIVED CATEGORIES AND REPRESENTATION THEORY

NORTHEASTERN UNIVERSITY, APRIL 30–MAY 4, 2012

All lectures and breakfast will take place in room 325 of the Berhakhis Center

Monday, April 30

- 9–9:30 breakfast
- 9:30–10:30 A. Okounkov, "Quantum cohomology of Nakajima varieties"
- 10:30–11 coffee
- 11–12 B. Keller, "Combinatorial DT invariants and cluster algebras, I"
- 12–1:30 lunch
- 1:30–2:30 A. Goncharov, "Ideal webs and moduli spaces of local systems on surfaces"
- 2:30–3:00 coffee
- 3:00–4:00 A. Bayer, "Projectivity and birational geometry of Bridgeland moduli space"

Tuesday, May 1

- 9–9:30 breakfast
- 9:30–10:30 B. Keller, "Combinatorial DT invariants and cluster algebras, II"
- 10:30–11 coffee
- 11–12 E. Macri, "Bogomolov-Giesker inequality in higher dimensions"
- 12–1:30 lunch
- 1:30–2:30 A. Efimov, "Quantum cluster monomials via DT theory"
- 2:30–3:00 coffee
- 3:00–4:00 M. Kapranov, "Cubic relations in Hall algebras and zeroes of zeta functions"
- 4:15–5:15 S. Gautam, "Yangians and quantum loop algebras"

Wednesday, May 2

- 9–9:30 breakfast
- 9:30–10:30 E. Vasserot, "Affine W -algebras and quiver varieties"
- 10:30–10:45 coffee
- 10:45–11:45 K. Nagao, "Donaldson–Thomas theory and mapping class group"
- 11:45–1:15 lunch
- 1:15–2:15 J. Kamnitzer, "Quantizations of affine Grassmannian slices using subquotients of Yangians"
- 2:15–2:45 coffee
- 2:45–3:45 P. Seidel, "Mirror symmetry for A_m resolutions and smoothings"

Thursday, May 3

- 9–9:30 breakfast
- 9:30–10:30 S. Cautis "Vertex operator constructions"
- 10:30–10:45 coffee
- 10:45–11:45 P. Shan, "Cyclotomic rational Cherednik algebras and affine Lie algebras"
- 11:45–1:15 lunch
- 1:15–2:15 R. Rouquier, "Perverse Equivalences, I"
- 2:15–2:45 coffee
- 2:45–3:45 V. Ginzburg, "The affine Grassmannian and symplectic geometry related to G/U "
- 6:30 Conference dinner at the Royal East Restaurant, 792 Main Street, Cambridge

Friday, May 4

- 9–9:30 breakfast
- 9:30–10:30 R. Rouquier, "Perverse Equivalences, II"
- 10:30–10:45 coffee
- 10:45–11:45 C. Stroppel, "Generalized Kazhdan-Lusztig polynomials and completed Grothendieck groups"
- 11:45–1:15 lunch
- 1:15–2:15 B. Webster, "The representation theory of symplectic singularities"
- 2:15–2:45 coffee
- 2:45–3:45 I. Losev, "Highest weight categorical sl_2 -actions"