

# Geometric Representation Theory 2016

Oct. 10 (Mon.) – Oct. 14 (Fri.), 2016

Kyoto University

Department of Mathematics, Room 110

Program (tentative)

## Oct. 10 (Mon.)

10:45 – 11:45	G.Williamson	(MPI and RIMS) Representations of algebraic groups and Koszul duality
13:45 – 14:45	M.Watanabe	(Preferred Networks, inc.) Schubert polynomials and Kraskiewicz-Pragacz modules
15:00 – 16:00	I.Losev	(Northeastern) Hecke algebras for complex reflection groups
16:15 – 17:15	A.Negut	(MIT)
17:30 – 18:30	A.Negut	(MIT) From Khovanov homology to Hilbert schemes of points

## Oct. 11 (Tue.)

9:30 – 10:30	X.Zhu	(Caltech) Kloosterman D-modules and Hitchin system with ramification
10:45 – 11:45	T.Kuwabara	(Tsukuba) Vertex algebras associated with the Hamiltonian reduction for hypertoric varieties
13:00 – 13:30	Reimbursement at RIMS 110	participants from abroad
13:45 – 14:45	A.Smirnov	(Berkeley) Rationality of descendants in quantum K-theory
15:00 – 16:00	S.Naito	(Titech) Standard monomial theory for semi-infinite LS paths with geometric application
16:15 – 17:15	H.Williams	(Texas) Cluster Theory of the Coherent Satake Category

## Oct. 12 (Wed.)

- 9:00 – 10:00 T.Ikeda (Okayama)  
Quantum K-theory of flag variety and K-homology of affine Grassmannian  
10:15 – 11:15 A.WEEKES (Perimeter Institute)  
Cohomology rings of quiver varieties, and a conjecture of Hikita  
11:30 – 12:30 S.Yanagida (Nagoya)  
Factorization space and deformation of Liouville CFT

## Oct. 13 (Thu.)

- 9:30 – 10:30 M.Kashiwara (RIMS)  
Monoidal categorification of cluster algebras by quiver Hecke algebras  
10:45 – 11:45 V.Ostrik (Oregon)  
A sign in the associativity constraint  
13:45 – 14:45 R.Kodera (Kyoto)  
Quantized Coulomb branches of Jordan quiver gauge theories and cyclotomic rational Cherednik algebras  
15:00 – 16:00 T.Hikita (RIMS)  
Remarks on canonical bases in equivariant K-theory  
16:15 – 17:15 K.Iwaki (Nagoya)  
Resurgence, exact WKB and wall-crossing  
17:30 – 18:30 P.McNamara (Queensland)  
Geometric Extension Algebras

## Oct. 14 (Fri.)

- 9:30 – 10:30 A.Braverman (Toronto)  
Coulomb branches of 4-dimensional gauge theories, double affine Hecke algebras and q-quasi-invariants  
10:45 – 11:45 Y.Saito (Tokyo)  
On quantum elliptic algebras  
13:45 – 14:45 M.Finkelberg (HSE)  
Comultiplication in the open Toda lattice and shifted yangians  
15:00 – 16:00 S.Ariki (Osaka)  
Representation type for block algebras of Hecke algebras  
16:15 – 17:15 A.Licata (ANU)  
The elliptic Hall algebra and the q-deformed Heisenberg category

Further information will be available at

<http://www.kurims.kyoto-u.ac.jp/~nakajima/grt2016.html>