

Algebraic Analysis and Around

in honor of Professor Masaki Kashiwara's 60th birthday

DATE: June 25 – 30, 2007

PLACE: Kyoto University, Kyoto, Japan

PROGRAM

June 25 (Monday)

- 09:30 – 10:30 **Hiraku Nakajima**
Sheaves on ALE spaces and quiver varieties
- 11:00 – 12:00 **Kazuya Kato**
Degeneration of mixed Hodge structures
- 13:30 – 14:30 **Eric Vasserot**
On finite dimensional modules of DAHA
- 14:40 – 15:40 **Shrawan Kumar**
On Cachazo-Douglas-Seiberg-Witten Conjecture for Simple Lie Algebras
- 16:00 – 17:00 **Vyjayanthi Chari**
Current algebras and quivers

June 26 (Tuesday)

- 09:00 – 10:00 **Dennis Gaitsgory**
Langlands duality for quantum groups
- 10:10 – 11:10 **Victor Ginzburg**
Character sheaves and Cherednik algebras
- 11:30 – 12:30 **Kyoji Saito**
Towards Categorical Construction of Lie Theory
- 13:30 – 14:30 **Seok-Jin Kang**
Perfect crystals and Young walls
- 14:40 – 15:40 **Bernard Leclerc**
Cluster algebras in Lie theory
- 16:00 – 17:00 **Raphael Rouquier**
Microlocalization of rational Cherednik algebras
(joint work with M. Kashiwara)

June 27 (Wednesday)

- 09:00 – 10:00 **Takeshi Saito**
Wild ramification and the characteristic cycle of an l -adic sheaf
- 10:30 – 11:30 **Alexander Beilinson**
Playing with Kashiwara's index formula
- 13:00 – 13:30 All presenters of the poster session
Introduction to papers
- 13:30 – 15:30 — *Poster Session* —
- 16:00 – 16:30 **Pierre Schapira**
Masaki Kashiwara and Algebraic Analysis
- 16:35 – 17:35 **Masaki Kashiwara**
Generalization of Lascoux-Leclerc-Thibon-Ariki theory

June 28 (Thursday)

- 09:00 – 10:00 **Francois Loeser**
Vanishing cycles and Fourier transform in motivic integration: first steps towards motivic microlocal geometry
- 13:30 – 14:30 **Shigefumi Mori**
On \mathbb{Q} -conic bundles
- 14:40 – 15:40 **Kari Vilonen**
Algebraic analysis and representation theory of Lie groups
- 16:00 – 17:00 **Morihiro Saito**
On b -function, spectrum, and multiplier ideals

June 29 (Friday)

- 09:00 – 10:00 **Takuro Mochizuki**
Harmonic bundle and D -module
- 10:30 – 11:30 **Edward Frenkel**
Quantization of soliton systems and Langlands duality
- 13:30 – 14:30 **Claude Sabbah**
On wild twistor D -modules
- 15:00 – 16:00 **Ian Grojnowski**
Hilbert schemes and integrable systems

June 30 (Saturday)

- 09:00 – 10:00 **Boris Feigin**
“Fusion” of the representations of quantum groups in
the root of unity
- 10:30 – 11:30 **Ivan Cherednik**
Toward Riemann’s Q-hypothesis
- 12:00 – 13:00 **Takahiro Kawai**
The Bender-Wu Analysis and the Voros Theory II.