

Algebraic Analysis and Around
in honor of Professor Masaki Kashiwara's 60th birthday

京都大学 21 世紀 COE プログラムの事業の一つとして、下記のように研究集会を催しますので、ご案内申し上げます。

なお、水曜日にバンケットを行います。参加される方は 6 月 15 日までに <http://www.math.kyoto-u.ac.jp/alan2007/enter.html> からリンクをたどり、on-line registration の項目から登録して下さい。バンケット費用は 5000 円、月曜日～水曜日に参加される方の登録料は 2000 円です。

Organizing committee

Chief organizers: T. Miwa, P. Schapira
Scientific advisors: B. Feigin, M. Jimbo, K. Kato, T. Kimura,
H. Nakajima, T. Oshima, T. Tanisaki
Managing organizers: T. Nakashima, A. Matsuo, Y. Saito

記

日時： 2007 年 6 月 25 日 (月) 9:00 ~
6 月 30 日 (土) 13:00

場所： 25 日 (月) ~ 27 日 (水) 芝蘭会館 稲盛ホール
28 日 (木) ~ 30 日 (土) 京都大学数理解析研究所 420 号室

Program

Monday, June 25 (Inamori Hall)

9:00 – 9:30 —*Registration*—

9:30 – 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

Tuesday, June 26 (Inamori Hall)

- 9:00 – 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)

Wednesday, June 27 (Inamori Hall)

- 9:00 – 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
- 17:45 – 18:15 —*Concert (Kalna Katsoum)*—
- 18:30 – 20:30 —*Banquet*—

Thursday, June 28 (RIMS 420)

- 10:30 – 11:30 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 Morihiko Saito
On b-function, spectrum, and multiplier ideals

Friday, June 29 (RIMS 420)

- 9:00 – 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

Saturday, June 30 (RIMS 420)

- 9:00 – 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 \mathbb{Q} -hypothesis
- 12:00 – 13:00 Takahiro Kawai
The Bender-Wu Analysis and the Voros Theory II.

List of Presenters in the Poster Session

Wednesday, June 27 (Inamori Hall)

13:00 – 13:30 Introductions to papers by all presenters

13:30 – 15:30 Poster Session

- Peter Tingley (University of California, Berkeley, Graduate Student)
“Three combinatorial models for affine $\mathfrak{sl}(n)$ crystals, with applications to cylindric plane partitions”
- Delphine Dupont (Laboratoire J. A. Dieudonné, Université de Nice Sophia-Antipolis, Graduate Student)
- Joel Kamnitzer (UC Berkeley / AIM, Postdoc)
- Kobi Kremnizer (MIT, Postdoc)
- Giovanni Morando (Institut de Mathématiques de Jussieu, Postdoc)
- Luca Prelli (Université Paris 6, Postdoc)
- Ana Rita Martins (Centro de Álgebra da Universidade de Lisboa)
- Pietro Polesello (University of Padova, Postdoc)
- Yuuki Abe (The University of Tokyo, Postdoc)
- Kouichi Takemura (Yokohama City University)
- Chun-Chung Hsieh (Math. Dept. Academia Sinica, TAIWAN)
“Linking in knot theory”
- Makoto Sakurai (Department of Physics, Faculty of Science, University of Tokyo, Graduate Student)
“Beilinson-Drinfeld chiral algebras for del Pezzo surfaces”
- Reiho Sakamoto (Department of Physics, The University of Tokyo, Graduate Student)
- Dong-il Lee (Department of Mathematical Sciences, Seoul National University, Graduate Student)
- Mugalu Andrew Sewava (Ziobwe Institute of Sciences and Technology)
- Anne Moreau (Institut de mathématiques de Jussieu, Postdoc)
“the nilpotent bicone of a reductive Lie algebra”
- Yasuhide Numata (Department of Mathematics, Hokkaido University, Postdoc)
- Hidekazu Watanabe (The University of Tokyo, Graduate School of Mathematical Sciences)
- Kentaro Wada (Nagoya University, Graduate Student)