

Symposium on

Recent topics in algebraic analysis
(代数解析日大研究集会)

Organizers: Naofumi Honda (Hokkaido University), Yasunori Okada (Chiba University),
Kohei Umeta (Nihon University) and Susumu Yamazaki (Nihon University)

March 3 (Tues.) ~ 5 (Thur.), 2026
Building No. 8 Room 831, Surugadai Campus,
College of Science and Technology, Nihon University

Program

March 3

- 12:30 - 13:15 Saiei-Jaeyeong Matsubara-Heo (Tohoku University)
The reciprocal GKZ system (joint work with Simon Telen (MPI MiS))
- 13:30 - 14:15 Ryosuke Sakamoto (Hokkaido University)
Strong Regularity and Microsupport Estimates in Multi-Microlocalization of Subanalytic Sheaves
- 14:30 - 15:15 Mika Tanda (Otemon Gakuin University)
Asymptotic Expansion of ASEP via Exact WKB Analysis
- 15:30 - 16:15 Keisuke Uchikoshi (Defense Academy)
Microlocal analysis of renormalization theory
- 16:30 - 17:15 Naoto Kumano-go (Kogakuin University)
Phase-space Feynman path integrals on a torus with general functional integrands via piecewise bicharacteristic paths

March 4

- 9:45 - 10:30 Shofu Uchida (Nihon University)
On the Borel transform of WKB solutions for the system satisfied by the oscillatory integral associated with a simple singularity of type A_4
- 10:45 - 11:30 Kohei Umeta (Nihon University)
On the sheaf of Laplace hyperfunctions of product type

- 13:30 - 14:15 Shinji Sasaki (OCAMI, Osaka Metropolitan University)
On analytic meaning of 2-parameter solutions of Painlevé equations
- 14:30 - 15:15 Daichi Komori (Kindai University)
Concrete description of the composition of pseudodifferential operators in the Čech-Dolbeault cohomology
- 15:30 - 16:15 Yoko Umeta (Hokkaido University)
A certain problem related to instanton solutions of higher-order Painlevé equations
- 16:30 - 17:15 Toshio Oshima (University of Tokyo)
Recurrence relations of solutions to hypergeometric equations

March 5

- 9:45 - 10:30 Yumiko Takei (Nihon University Junior College)
On the exact WKB analysis of a difference equation satisfied by the Gauss hypergeometric function
- 10:45 - 11:30 Tatsuki Nishida (Sojo University)
Relative Čech-Dolbeault cohomology and acyclic sheaves
- 13:30 - 14:15 Toshihiro Oshiba (Hokkaido University)
Microlocal Morse theory and truncated microsupport
- 14:30 - 15:15 Sampei Hirose (Shibaura Institute of Technology)
Asymptotic analysis for an oscillatory integral related to critical points at infinity
- 15:30 - 16:15 Yutaka Matsui (Kindai University)
Microlocal study of bicomplex analysis

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