

Workshop on

Algebraic Analysis in Yamaguchi - D-module, microlocal analysis, summability

Organizers

Naofumi Honda (Hokkaido Univ.), Yasunori Okada (Chiba Univ.),
Susumu Yamazaki (Nihon Univ.), Yoko Umeta (Yamaguchi Univ.)

November 17 (Fri) ~ 20 (Mon), 2017

Venue: Kanponoyado Yuda,
1-42, Kanda-cho, Yamaguchi-shi, 753-0064, Japan

Program

November 17, Friday

16:00–16:45 Yoko Umeta (Yamaguchi University)
Stokes geometry for a unified family of some Painlevé hierarchies

17:00–17:45 Yasunori Okada (Chiba University)
Diagonal embedding method for solving coupling equations

November 18, Saturday

8:45–9:30 Naofumi Honda (Hokkaido University)
Hyperfunction and Čech-Dolbeault cohomology in the microlocal point of view

9:45–10:30 Susumu Yamazaki (Nihon University)
Boundary Value problem for Hyperfunction Solutions to Fuchsian Systems

November 19, Sunday

8:45–9:30 Yves Laurent (Université Grenoble Alpes, France)
Kirillov conjecture and D-modules

9:45–10:30 Nobuyuki Ota (Chiba University)
On quantifier elimination and its applications

10:45–11:30 Kohei Umeta (Nihon University)
Laplace hyperfunctions from the viewpoint of Čech-Dolbeault cohomology
(a joint work with N.Honda)

- 13:30–14:15 Saiei-Jaeyeong Matsubara-Heo (the University of Tokyo)
Residue trick for integral representations of GKZ hypergeometric equations
- 14:30–15:15 Shingo Kamimoto (Hiroshima University)
Resurgence and iterated convolution
- 15:30–16:15 Masafumi Yoshino (Hiroshima University)
Movable singularity of Hamiltonian system and monomial summability
- 16:30–17:15 Reinhard Schäfke (Université Strasbourg, France)
Towards the summability of WKB-solutions for third order singularly perturbed ODE

November 20, Monday

- 8:45–9:30 Daichi Komori (Hokkaido University)
Intuitive representation of local cohomology groups
- 9:35–10:20 Mika Tanda (Kwansei Gakuin University)
Relation between the hypergeometric function and WKB solutions
- 10:25–11:10 Masatake Miyake (Nagoya University)
Determination of the irregularity for a singular system of ODEs based on the argument by Volevič and Moser
- 11:15–12:00 Shinichi Tajima (University of Tsukuba)
Parametric local cohomology systems and algorithms for computing local Euler obstructions

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