RIMS

Organizer Naofumi Honda (Hokkaido University)
Coorganizer Yasunori Okada (Chiba University)

October 3 (Mon.) ∼ 7 (Fri.), 2016
Room No. 111 of RIMS, Kyoto University

Program

October 3, Monday

10:00 - 10:50 Joe Kamimoto (Kyushu University)
　　　　　　　On analytic continuation of local zeta functions
11:10 - 12:00 Saiei-Jaeyeong Matsubara-Heo (University of Tokyo)
　　　　　　　On the rapid decay homology of F.Pham
13:30 - 14:20 Yasunori Okada (Chiba University)
　　　　　　　A continuation method for coupling transforms (joint work with R. Schäfke and H. Tahara)
14:35 - 15:10 Daichi Komori (Hokkaido University)
　　　　　　　Intuitive representation of a local cohomology group
15:20 - 15:55 Kohei Umeta (Hokkaido University)
　　　　　　　A vanishing theorem of global cohomology groups with values in the sheaf of Whitney jets
　　　　　　　with Gevrey conditions (joint work with N. Honda and T. Simoyama)
16:10 - 17:00 Kiyoomi Kataoka (University of Tokyo)
　　　　　　　Sobolev forms for microfunctions with real analytic parameters and the microlocal energy
　　　　　　　method

October 4, Tuesday

10:00 - 10:50 Hideshi Yamane (Kwansei Gakuin University)
　　　　　　　Asymptotics for the focusing integrable discrete nonlinear Schrödinger equation
11:10 - 12:00 Naoto Kumano-go (Kogakuin University
　　　　　　　Phase space path integral of higher order parabolic type with general functional as integrand
13:40 - 14:30 Toshinori Oaku (Tokyo Woman's Christian University)
　　　　　　　An algorithmic study on the integration of holonomic distributions
14:50 - 15:40 Yutaka Matsui (Kindai University)
　　　　　　　Topological Radon transforms and their applications
16:00 - 16:50 Shinichi Tajima (University of Tsukuba)
　　　　　　　Local cohomology solutions of holonomic D-modules associated with non-isolated hypersur-
　　　　　　　face singularities

October 5, Wednesday

10:00 - 10:50 Katsuyoshi Ohara (Kanazawa University)
Comprehensive Groebner systems in Poincare-Birkhoff-Witt algebra and Bernstein-Sato ideals (joint work with K. Nabeshima and S. Tajima)

11:10 - 12:00 Hiroshi Yamazawa (Shibaura Institute of Technology)
Singular solutions of the Briot-Bouquet type equations
—partial differential equation and q-difference-differential equation—

13:40 - 14:30 Masafumi Yoshino (Hiroshima University)
Moving singularity and monodromy of Hamiltonian system containing generalized Emden-Fowler equation

14:50 - 15:40 Yoko Umeta (Yamaguchi University)
Stokes geometry for a unified family of some Painlevé hierarchies

16:00 - 16:50 Hidetoshi Tahara (Sophia University)
On the summability of formal solutions of some linear q-difference partial differential equations

October 6, Thursday

10:00 - 10:35 Toshinori Takahashi (Kindai University)
Exact WKB analysis and Jacobi polynomials with varying nonstandard parameters (joint work with T. Aoki and M. Tanda)

11:00 - 11:50 Takashi Aoki (Kindai University)
The hypergeometric function, confluent hypergeometric functions and WKB solutions (joint work with T. Takahashi and M. Tanda)

13:40 - 14:30 Naofumi Honda (Hokkaido University) and Takahiro Kawai (RIMS)
A unified treatment of pinch points and cusps in Landau-Nakanishi surfaces with microlocal analysis

14:50 - 15:40 Sampei Hirose (Shibaura Institute of Technology)
On non-hereditary turning points; particular turning points which appear in the deformation theory of ordinary differential equations

16:00 - 16:50 Sampei Hirose, Takahiro Kawai (RIMS) and Yoshitsugu Takei (RIMS)
On some recent results in the theory of virtual turning points

October 7, Friday

10:30 - 11:05 Takahiro Shigaki (Kobe University)
Nonlinear eigenvalue problems and exact WKB analysis

11:25 - 12:00 Kenji Kurogi (Hiroshima University)
Counterexample to the summability of the formal solution of some PDE

13:40 - 14:30 Yasuyuki Hatsuda (University of Geneva)
Quantization Conditions in Difference Equations

14:50 - 15:40 Kohei Iwaki (Nagoya University)
Exact WKB analysis vs spectral networks

16:00 - 16:50 Eric Delabaere (Université d'Angers)
Several topics about resurgence theory