RIMS Symposium on

Recent development of micro-local analysis for the theory of asymptotic analysis

Organizers: Naofumi Honda, Yasunori Okada and Motoo Uchida

November 15(Tue.) $\sim$ 18(Fri.), 2011
Room No. 110 of RIMS, Kyoto University

Program

November 15, Tuesday

10:00 - 11:00 Yasunori Okada (Chiba Univ.)
Massera type theorems in hyperfunctions with reflexive Banach values

11:15 - 12:15 Hideshi Yamane (Kwansei Gakuin Univ.)
Local existence for nonlinear Cauchy problems with small analytic data

13:30 - 14:30 Keisuke Uchikoshi (National Defense Academy of Japan)
Singularity propagation of compressible perfect fluid

14:45 - 15:45 Joe KAMIMOTO (Kyushu Univ.) and Toshihiro Nose (Kyushu Univ.)
Newton polyhedra and oscillatory integrals

16:00 - 17:00 Shinichi Tajima (Tsukuba Univ.)
Polar varieties and holonomic $\mathcal{D}_X$ module

November 16, Wednesday

9:00 - 10:00 Naofumi Honda (Hokkaido Univ.) and Luca PRELLI (Univ. Padova)
Multi-specialization and multi-asymptotic expansions

10:15 - 11:15 Susumu Yamazaki (Nihon Univ.)
Boundary Values of Ultradistribution Solutions to Regular-Specializable Systems

11:30 - 12:00 Dennis Bacani (Sophia Univ.)
Existence and uniqueness theorem for a class of singular nonlinear partial differential equations

13:30 - 14:30 Kunio Ichinobe (Aichi Univ. of Education)
Summability of formal solution of Cauchy problem for some PDE with variable coefficients

14:45 - 15:45 Kiyoomi KATAOKA (Univ. Tokyo) and Nobuko Takeuchi (Tokyo Gakugei Univ.)
The non-integrability of some system of fifth-order partial differential equations describing surfaces containing 6 families of circles

November 17, Thursday

10:00 - 11:00 Hidetoshi Tahara (Sophia Univ.)
Maillet type theorem and Gevrey regularity in time of solutions to nonlinear partial differential equations

11:15 - 12:15 Naofumi Honda (Hokkaido Univ.) and Kouhei UMETA (Hokkaido Univ.)
Vanishing theorem for holomorphic functions of exponential type and Laplace hyperfunctions

13:30 - 14:30 Takashi Aoki (Kinki Univ.) and Mika TANDA (Kinki Univ.)
Voros coefficients of hypergeometric differential equations with a large parameter

14:45 - 15:45 Hiroshi Yamazawa (Caritas Junior College)
Borel summability of a formal solution for Cauchy problem of some linear partial differential equations

16:00 - 17:00 Masafumi Yoshino (Hiroshima Univ.)
Singular integrability and monodromy property of a resonant Hamiltonian system

November 18, Friday

10:00 - 11:00 Shingo KAMIMOTO (Univ. Tokyo) and Tatsuya Koike (Kobe Univ.)
On the Borel summability of 0-parameter solutions of nonlinear ordinary differential equations

11:15 - 12:15 Youko Umeta (Hokkaido Univ.)
On a construction of instanton-type solutions for the second Painlevé hierarchy

13:30 - 14:30 Kouhei Iwaki (RIMS, Kyoto Univ.)
Parametric Stokes phenomena for Painlevé equations

14:45 - 15:45 Sampei Hirose (RIMS, Kyoto Univ.)
On the Stokes geometry for the hypergeometric system of type (1,4)

16:00 - 17:00 Tatsuya Koike (Kobe Univ.) and Yoshitsugu Takei (RIMS, Kyoto Univ.)
Exact WKB analysis of second-order non-homogeneous linear differential equations — Bifurcated integral and Borel summability —