

RIMS 研究集会

漸近解析に於ける超局所解析の展望

研究代表者: 本多尚文 (北大・理), 岡田靖則 (千葉大・理), 内田素夫 (阪大・理)

2011年11月15日(火) ~ 18日(金)
京都大学数理解析研究所 110号室

プログラム

11月15日(火)

- 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

11月16日(水)

- 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

11月17日(木)

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

11月18日(金)

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 —