

RIMS 共同研究

複素の偏微分方程式における代数解析的方法



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京都大学数理解析研究所 111号室

プログラム

December 8, Tuesday

- 10:00 - 10:50 Naofumi Honda (Hokkaido University)
Apparent parameter technique and vanishing of cohomology groups with Whitney holomorphic functions
- 11:10 - 12:00 Luca Prelli (Universidade de Lisboa)
Generalization of multi-specializations and multi-asymptotics
- 13:30 - 14:20 Kohei Umeta (Hokkaido University)
On the theory of Laplace hyperfunctions in several variables
(a joint work with Naofumi Honda)
- 14:40 - 15:30 Giovanni Morando (Augsburg University)
Enhanced sheaves, direct images and Fourier transform of D-modules
- 15:50 - 16:40 Masatake Miyake (Nagoya University)
A counterexample for Barkatou's conjecture on the exponential growth of solutions for Morse irreducible system and surgery operations of system transformations

December 9, Wednesday

- 10:00 - 10:50 Hiroshi Yamazawa (Shibaura Institute of Technology)
Summability of formal solutions for $\epsilon t^{r+1} \frac{\partial}{\partial t} u = f(t, u)$
- 11:10 - 12:00 Stéphane Malek (University of Lille)
Parametric multisummable formal solutions to nonlinear PDEs
- 13:30 - 14:20 Sunao Ōuchi (Sophia University)
Functional equations with solutions of irregular singular type

14:40 - 15:30 Jose Ernie C. Lope (University of the Philippines Diliman)
A Nagumo-type theorem on nonlinear Fuchsian partial differential equations

15:50 - 16:40 Hidetoshi Tahara (Sophia University)
On singular solutions of nonlinear singular partial differential equations in a sectorial domain

December 10, Thursday

09:00 - 09:50 Alberto Lastra (University of Alcalá)
Parametric multilevel q -Gevrey asymptotics for some linear Cauchy problem

10:00 - 10:50 Yasunori Okada (Chiba University)
Coupling transforms and the reversibility

11:10 - 12:00 Kunio Ichinobe (Aichi University of Education)
 k -summability of formal solutions for certain partial differential equations and the method of successive approximation

13:30 - 14:20 Jorge Mozo Fernández (University of Valladolid)
Application of monomial summability to singularly perturbed Pfaffian systems

14:40 - 15:30 Yoshishige Haraoka (Kumamoto University)
Connection problem for regular holonomic systems

15:50 - 16:40 Toshio Oshima (Josai University)
Reducibility of hypergeometric equations

December 11, Friday

10:00 - 10:50 Yoko Umeta (Yamaguchi University)
Instanton-type solutions for a unified family of $(P_J)_m$ ($J = I, II, IV, 34$)

11:10 - 12:00 Javier Sanz (Universidad de Valladolid)
Multisummability in ultraholomorphic classes associated to strongly regular sequences

13:30 - 14:20 Free discussion

14:40 - 15:30 Masafumi Yoshino (Hiroshima University)
Semi-global non integrability of Hamiltonian system and Borel summability

15:50 - 16:40 Susumu Yamazaki (Nihon University)
Boundary value problem for hyperfunction solutions to Fuchsian systems

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