

超局所解析と特異摂動論

研 究 集 会

京都大学数理解析研究所の共同研究事業の一つとして、下記のように研究集会を催しますので、ご案内申し上げます。

研究代表者 竹井 義次
(京大・数理研)

記

日 時 : 2015年10月5日(月) 13:00 ~ 10月9日(金) 17:00

場 所 : 京都大学数理解析研究所 4階 420号室

市バス 京大農学部前 または 北白川 下車

プログラム

10月5日(月)

- 13:00 ~ 13:50 Pierre Schapira (Paris, France)
Grothendieck topologies for analysis
- 14:00 ~ 14:50 Kiyoomi Kataoka (Univ. of Tokyo)
The functor $\beta_Y(\cdot)$ and mixed problems for $\mathcal{D}_X$ -modules
- 15:10 ~ 16:00 Masafumi Yoshino (Hiroshima Univ.)
Monodromy of some resonant Hamiltonian system
- 16:10 ~ 17:00 Shinji Sasaki (RIMS, Kyoto Univ.)
Bifurcation phenomenon of Stokes curves around a double turning point and influence of virtual turning points upon nonadiabatic transition probabilities

10月6日(火)

- 10:00 ~ 10:50 Setsuro Fujiie (Ritsumeikan Univ.)
Resonances near an energy-level crossing
- 11:10 ~ 12:00 Johannes Sjöstrand (Dijon, France)
Non-self-adjoint perturbations of completely integrable Hamiltonians in 2D — rational tori and spectral centipedes
(joint work with Michael Hitrik)
- 14:00 ~ 14:50 Reinhard Schäfke (Strasbourg, France)
Factorisation of fundamental WKB-solutions
(joint work with Charlotte Hulek)
- 15:10 ~ 16:00 Keisuke Uchikoshi (National Defense Academy)
On gravity water waves
- 16:10 ~ 17:00 Takahiro Kawai (RIMS, Kyoto Univ.) and
Naofumi Honda (Hokkaido Univ.)
An invitation to Sato's postulates in micro-analytic S -matrix theory

10月7日(水)

- 10:00 ~ 10:50 Ovidiu Costin (Ohio State, USA)
Exact WKB and resurgence
- 11:10 ~ 12:00 Masaki Kashiwara (RIMS, Kyoto Univ.)
Riemann-Hilbert problem of irregular holonomic D-modules
- 18:30 ~ < Party >

10月8日(木)

- 10:00 ~ 10:50 Yuichi Ike (Univ. of Tokyo)
Hyperbolic localization and Lefschetz fixed point formulas for higher-dimensional fixed point sets
- 11:10 ~ 12:00 Yves Laurent (Grenoble, France)
 b -functions and regular holonomic $\mathcal{D}$ -modules
- 14:00 ~ 14:50 Toshio Oshima (Josai Univ.)
Linear ordinary differential equations in the complex domain and hypergeometric systems
- 15:10 ~ 16:00 Toshinori Oaku (Tokyo Woman's Univ.)
Some algorithmic problems for holonomic distributions
- 16:10 ~ 17:00 Hikosaburo Komatsu (Univ. of Tokyo)
History of mathematics of the world due to 「D.E. Smith」

10月9日(金)

- 10:00 ~ 10:50 Tatsuya Koike (Kobe Univ.)
A remark on the growth order of Borel transform of WKB solutions of one-dimensional Schrödinger equations — Toward a proof of its multisummability
- 11:10 ~ 12:00 David Sauzin (Pisa, Italy & CNRS, France)
Nonlinear analysis with endlessly continuable functions
(joint work with Shingo Kamimoto)
- 14:00 ~ 14:50 Kohei Iwaki (Nagoya Univ.)
Topological recursion, quantum curves and Painlevé equations
- 15:10 ~ 16:00 Takashi Aoki (Kinki Univ.)
The hypergeometric function and WKB solutions
- 16:10 ~ 17:00 Yoshitsugu Takei (RIMS, Kyoto Univ.)
On the exact WKB analysis of discrete Painlevé equations