Differential Equations and Exact WKB Analysis

October 9 (Tue) – October 12 (Fri), 2007
Lecture Hall (Room No. 420) of RIMS, Kyoto University

Program

October 9, Tuesday

14:00 – 15:00	Naofumi Honda (Hokkaido Univ) The geometric structure of virtual turning points, I
15:15 – 16:15	Yutaka Matsui (Univ of Tokyo) and Kiyoshi Takeuchi (Univ of Tsukuba) Microlocal study of Lefschetz fixed point formulas
16:30 – 17:30	Setsuro Fujiie (Univ of Hyogo) Propagation of microlocal solutions at a hyperbolic fixed point

October 10, Wednesday

10:00 – 11:00	Naofumi Honda (Hokkaido Univ) The geometric structure of virtual turning points, II
11:15 – 12:15	Masafumi Yoshino (Hiroshima Univ) Analytic non-integrable Hamiltonian systems and monodromy property
14:00 – 15:00	Hidekazu Ito (Kanazawa Univ) Birkhoff normal forms for superintegrable systems
15:15 – 16:15	Chisato Iwasaki (Univ of Hyogo) Construction of the fundamental solution and curvature of manifolds
16:30 – 17:30	Michael Ruzhansky (Imperial College London) Strichartz estimates for hyperbolic equations

October 11, Thursday

10:00 – 11:00 Takashi Aoki (Kinki Univ), Takahiro Kawai (RIMS, Kyoto Univ) and Yoshitsugu Takei (RIMS, Kyoto Univ)
The Bender-Wu analysis and the Voros theory (Part2), I

11:15 – 12:15 Masa-Hiko Saito (Kobe Univ)
Algebro-geometric constructions of phase spaces, Riemann-Hilbert correspondences and Painlevé property

14:00 – 15:00 Katsunori Iwasaki (Kyushu Univ) and Takato Uehara (Kyushu Univ)
Area-preserving surface dynamics and S. Saito's fixed point formula

15:15 – 16:15 Yoshikatsu Sasaki (Univ of Tokyo)
Value distribution of meromorphic solutions to a higher order analogue of the Painlevé equation

16:30 – 17:30 Seiji Nishioka (Univ of Tokyo)
Difference algebra associated to the q-Painlevé equation of type $A_7^{(1)}$

October 12, Friday

10:00 – 11:00 Masaki Kashiwara (RIMS, Kyoto Univ)
Quantization of symplectic manifolds and rational Cherednik algebras

11:15 – 12:15 Louis Boutet de Monvel (Univ de Paris 6)
Asymptotic equivariant index of Toeplitz operators, and Atiyah-Weinstein conjecture, I

14:00 – 15:00 Louis Boutet de Monvel (Univ de Paris 6)
Asymptotic equivariant index of Toeplitz operators, and Atiyah-Weinstein conjecture, II

15:15 – 16:15 Takashi Aoki (Kinki Univ), Takahiro Kawai (RIMS, Kyoto Univ) and Yoshitsugu Takei (RIMS, Kyoto Univ)
The Bender-Wu analysis and the Voros theory (Part2), II

16:30 – 17:30 Masaki Hibino (Okayama Univ of Science)
Summability of formal solutions for singular first order linear PDEs with holomorphic coefficients