Analytic, Algebraic and Geometric Aspects
of Differential Equations

September 14 – 19, 2015

Conference Program

Monday, September 14

9.00–9.15 OPENING CEREMONY

Chairman: HENRYK ŻOŁĄDEK

9.20–10.10 PETER CLARKSON (University of Kent)
Semi-classical orthogonal polynomials and the Painlevé equations

10.10–10.40 Coffee break

10.40–11.30 HIRONOBU KIMURA (Kumamoto University)
Semi classical orthogonal polynomials and general Schlesinger system

11.40–12.30 YOSHISHIGE HARAOKA (Kumamoto University)
Connection problem for regular holonomic systems

13.00 Lunch

Chairman: DAVIDE GUZZETTI

15.00–15.25 EWA CIECHANOWICZ (University of Szczecin)
Value distribution and growth of solutions of the second order ODEs

15.30–15.55 TAKAO SUZUKI (Kinki University)
Higher order Painlevé systems, rigid systems and hypergeometric functions

16.00–16.25 THOMAS DREYFUS (Université de Toulouse)
Computation of differential Galois groups via reduced form

16.25–16.40 Coffee break

Chairman: Lubomir Gavrilov

16.40–17.20 Tsvetana Stoyanova (Sofia University)
Non-integrability of the Painlevé equations and Stokes phenomenon

17.25–17.50 Hiroshi Ogawara (Kumamoto University)
Difference reducibility of linear difference equations

17.55–18.20 Takuya Yamashiro (Kumamoto University)
Holonomic system singular along an algebraic curve with cusps

19.00 Dinner

Tuesday, September 15

Chairman: Yoshishige Haraoka

9.00–9.50 Javier Sanz (University of Valladolid)
Multi-level asymptotics for singularly perturbed linear partial differential equations with ultraholomorphic coefficients

9.50–10.20 Coffee break

10.20–11.10 Jiro Sekiguchi (Tokyo University of Agriculture and Technology)
A generalisation of WDVV equation and flat structures

11.20–12.10 Toshio Oshima (Josai University)
Hypergeometric functions with several variables

12.20–12.45 Martin Klimeš (Université de Strasbourg)
On the center manifold of unfolded complex saddle-node singularities

12.50 Conference photo

13.00 Lunch

Chairman: PETER CLARKSON

15.00–15.25 MICHAŁ ZAKRZEWSKI (Jan Kochanowski University)
Linear multi-variable polylogarithms

15.30–15.55 AKIHITO EBISU (Hokkaido University)
Special values of hypergeometric series

16.00–16.25 ELLEN DOWIE (University of Kent)
Rational solutions of the Boussinesq equation and the non-linear Schrödinger equation

16.25–16.40 Coffee break

Chairman: HIRONOBU KIMURA

16.40–17.05 RENAT GONTSOV (IITP RAS)
A Maillet type theorem for generalized power series

17.10–17.35 YULIYA BIBILO (IITP RAS)
Inverse monodromy problems and middle convolution

17.40–18.05 SAMPEI HIROSE (Shibaura Institute of Technology)
On the relationship between the BNR equation and the Pearcey system

19.00 Conference Dinner

Wednesday, September 16

Chairman: YOSHITSUGU TAKEI

9.00–9.50 SHINGO KAMIMOTO (Hiroshima University)
Convolutions and analytical continuability of holomorphic functions

9.50–10.20 Coffee break

10.20–11.10 HENRYK ŻOŁĄDEK (Warsaw University)
The center problem for polynomial Abel equation

11.20–12.10 MASAFUMI YOSHINO (Hiroshima University)
Borel summability of formal solutions of first order system of PDE

12.20 Lunch   [13.30–19.30] Excursion   [19.30] Dinner

Thursday, September 17

Chairman: MASAFUMI YOSHINO

9.00–9.50 TAKASHI AOKI (Kinki University)
The hypergeometric function and WKB solutions

9.50–10.20 Coffee break

10.20–11.10 YOSHITSUGU TAKEI (RIMS, Kyoto University)
WKB analysis for the discrete Painlevé equation

11.20–12.10 STEFAN HILGER (Katholische Universität Eichstätt-Ingolstadt)
$(q; h)$**-deformation of** $U(sl(2))$

12.20–12.45 HIROE KAZUKI (Josai University)
Ramified irregular singularities of meromorphic connections and plane curve singularities

13.00 Lunch

Chairman: MASATAKI MIYAKE

15.00–15.25 DENNIS BACANI (Sophia University)
Lifespan of solutions to nonlinear Cauchy problems with small analytic data

15.30–15.55 KUNIO ICHINOBE (Aichi University of Education)
k-summability of formal solutions for certain partial differential equations with time dependent polynomial coefficients

16.00–16.25 JAVIER JIMENEZ-GARRIDO (University of Valladolid)
Strongly regular sequences, proximate orders and summability

16.25–16.40 Coffee break

Chairman: HIDETOSHI TAHARA

16.40–17.05 JOSE ERNIE LOPE (University of the Philippines Diliman)
Gevrey solutions of a singular integro-differential equation

17.10–17.35 YASUNORI OKADA (Chiba University)
On coupling equations and their reversibility

17.40–18.05 HIDESHI YAMANE (Kwansei Gakuin University)
Asymptotic behavior of solutions of the defocusing integrable discrete nonlinear Schrödinger equation

18.50 Bonfire

Friday, September 18

Chairman: JAVIER SANZ

9.00–9.50 ALBERTO LASTRA (University of Alcalá)
Multi-level Gevrey solutions of singularly perturbed linear partial differential equations

9.50–10.20 Coffee break

10.20–11.10 MASATAKE MIYAKE (Nagoya University)
Exponential growth order of solutions for Moser irreducible system and a counterexample for Barkatou's conjecture

11.20–12.10 HIDETOSHI TAHARA (Sophia University)
Analytic continuation of solutions to nonlinear convolution partial differential equations and its application

12.20–12.45 BOŻENA PODHAJECKA (Cardinal Stefan Wyszyński University)
Stokes phenomenon in certain partial differential equations

13.00 Lunch

Chairman: TOSHIO OSHIMA

15.00–15.40 SŁAWOMIR MICHALIK (Cardinal Stefan Wyszyński University)
Summability of divergent solutions of some linear partial differential equations with variable coefficients

15.40–16.00 Coffee break

16.00–16.40 GRZEGORZ ŁYSIK (Jan Kochanowski University)
Mean values and real analytic functions

16.45–17.10 GALINA FILIPUK (Warsaw University)
On $(q; h)$-Weyl algebras

17.20–19.00 Walk to the Lake

19.00 Dinner

Saturday, September 19

8.00 Departure