

# Exponential Asymptotics of Difference and Differential Equations

June 6 (Mon) – June 8 (Wed), 2016

Room No. 110 of RIMS, Kyoto University

## June 6, Monday

13:00 – : *Session on “Discrete Painlevé Equations”*

Nalini Joshi (Sydney)

Geometric asymptotic of discrete Painlevé equations

Yousuke Ohyama (Tokushima)

$q$ -Painlevé equations and  $q$ -Stokes phenomenon of linear  $q$ -difference equations

Toshiyuki Mano (Ryukyu)

Asymptotic behaviors of solutions to the  $q$ -Painlevé VI equation

## June 7, Tuesday

09:30 – : *Session on “Hyperasymptotic Analysis”*

Chris J. Howls (Southampton)

Airey on Airy: Postponing the Inevitable

Chris Lustrì (Sydney)

Finding the Stokes structure of discrete equations using late-order terms

13:00 – : *Session on “Hypergeometric Difference Equations”*

Yoshifumi Katsushima (Tokyo)

A connection problem of the hypergeometric difference equation

Takeshi Morita (Kobe)

On first order  $q$ -difference equations and divergent bilateral basic hypergeometric series

15:30 – : *Session on “ $q$ -Difference PDEs”*

Hidetoshi Tahara (Sophia Univ.)

Summability of formal solutions of some linear  $q$ -difference partial differential equations

Hiroshi Yamazawa (Shibaura Institute of Technology)

Singular solutions of  $q$ -difference-differential equations of the Briot-Bouquet type

## June 8, Wednesday

09:30 – : *Session on “Exact WKB Analysis and Quantum Physics”*

Akira Shudo (Tokyo Metropolitan Univ.)

Anomalous behavior of transition matrix elements in nonintegrable quantum maps

Shinji Sasaki (Kindai Univ.)

On parametric Stokes phenomena of higher order linear ODEs

13:00 – : *Session on “Exact WKB Analysis and Painlevé Equations”*

Yoshitsugu Takei (RIMS, Kyoto)

Toward the exact WKB analysis of systems of differential-difference equations