

幾何構造と微分方程式  
— 対称性・特異点及び量子化の視点から —

Geometric Structures and Differential Equations  
— Symmetry, Singularity, and Quantization —

Dates: From 14/March/2022 till 18/March/2022

Participation: Through Zoom meeting.

Please register through the following URL by 4/March/2022:

<https://ritsumeai-ac-jp.zoom.us/meeting/register/tJYpfuyoqDsoGd00oIvjRCGAW494F6ES2TJT>

Organizers: Daisuke Tarama (Ritsumeikan University, main)

Kenro Furutani (Osaka City University / Tokyo University of Science)

Hiroaki Yoshimura (Waseda University)

Contact: Daisuke Tarama (dtarama [at] fc.ritsumeai.ac.jp)

Remark: The following schedule is written in

Japanese Standard Time (JST = UTC + 0900) / Central European Time (CET = UTC + 0100).

Monday, 14/March/2022

12:50 – 13:00 (JST) / 4:50 – 5:00 (CET) Opening

13:00 – 14:00 (JST) / 5:00 – 6:00 (CET) Takuma Tomihisa (Waseda University)

*Higher spin Dirac operators*

14:20 – 15:20 (JST) / 6:20 – 7:20 (CET) Hidekazu Ito (Kanagawa University)

*Birkhoff normalization for a family of superintegrable symplectic maps and its application*

16:00 – 17:00 (JST) / 8:00 – 9:00 (CET) Jean-Pierre Francoise (Sorbonne University)

*Integrable Systems and their discretization*

17:20 – 18:20 (JST) / 9:20 – 10:20 (CET) Sonja Hohloch (University of Antwerp)

*$S^1$ -actions, semitoric systems, and hyperbolic singularities*

Tuesday, 15/March/2022

13:00 – 14:00 (JST) / 5:00 – 6:00 (CET) Akira Kitaoka (University of Tokyo)

*Ray-Singer torsion and the Rumin Laplacian on lens spaces*

14:20 – 15:20 (JST) / 6:20 – 7:20 (CET) Kazuyuki Yagasaki (Kyoto University)

*Some recent results on nonintegrability of dynamical systems*

16:00 – 17:00 (JST) / 8:00 – 9:00 (CET) Tudor S. Ratiu (Shanghai Jiao Tong University)

*Teichmüller space and differential character valued momentum maps*

17:20 – 18:20 (JST) / 9:20 – 10:20 (CET) Wolfram Bauer (Leibniz University Hannover)

*Trivializable subriemannian structures on spheres and subelliptic heat equation*

Wednesday, 16/March/2022

13:00 – 14:00 (JST) / 5:00 – 6:00 (CET) Yuji Hirota (Azabu University)

*Dirac structures over the space of connections on 3 and 4 dimensional Riemannian manifolds*

14:20 – 15:20 (JST) / 6:20 – 7:20 (CET) Tomoyuki Kakehi (University of Tsukuba)

*Surjectivity of convolution operators*

16:00 – 17:00 (JST) / 8:00 – 9:00 (CET) Elmar Schrohe (Leibniz University Hannover)

*Degenerate Elliptic Boundary Value Problems with Non-smooth Coefficients*

17:20 – 18:20 (JST) / 9:20 – 10:20 (CET) Abdellah Laaroussi (Leibniz University Hannover)

*Heat kernel asymptotics for quaternionic contact manifolds*

Thursday, 17/March/2022

13:00 – 14:00 (JST) / 5:00 – 6:00 (CET) Shoya Motonaga (Kyoto University)

*Obstructions to integrability of nearly integrable dynamical systems near regular level sets*

14:20 – 15:20 (JST) / 6:20 – 7:20 (CET) Hiroyuki Chihara (University of the Ryukyus)

*Microlocal analysis of d-plane transform on the Euclidean space*

16:00 – 17:00 (JST) / 8:00 – 9:00 (CET) Ryszard Nest (University of Copenhagen)

*Automorphisms of Boutet de Monvel algebra*

17:20 – 18:20 (JST) / 9:20 – 10:20 (CET) Irina Markina (University of Bergen)

*A unified approach to extremal curves on Stiefel manifolds*

Friday, 18/March/2022

13:00 – 14:00 (JST) / 5:00 – 6:00 (CET) Genki Ishikawa (Ritsumeikan University)

*An elliptic fibration arising from the Lagrange top*

14:20 – 15:20 (JST) / 6:20 – 7:20 (CET) Setsuro Fujiié (Ritsumeikan University)

*WKB and microlocal approach to various Bohr-Sommerfeld quantization rules*

15:20 – 15:30 (JST) / 7:20 – 7:30 (CET) Closing

