

Submanifold Geometry, Lie Group Action and Its Applications to Theoretical Physics

Date : November 22 - 24, 2024

Place : Osaka Metropolitan University, Sugimoto Campus

Program

November 22

- 9:50 – 9:55 Opening

- 9:55 - 10:55

Speaker: Wenjiao Yan (Beijing Normal University)

Title: Orthogonal almost complex structure and Nijenhuis tensor

- 11:15 - 12:15

Speaker: Jong Taek Cho (Chonnam National University, Korea)

Title: Contact structures, CR-structures and hypersurface theory

(online talk)

Photo

Lunch

- 14:00 - 14:50

Speaker: Tomoki Fujii (Tokyo University of Science, Japan)

Title: Graphical solitons invariant under hyperpolar actions

- 15:10 - 16:00

Speaker: Keita Kunikawa (Tokushima University, Japan)

Title: Index estimate by first Betti number of minimal hypersurface
in compact symmetric space: Part I

- 16:20 – 17:20

Speaker: Toru Kajigaya (Tokyo University of Science, Japan)

Title: Index estimate by first Betti number of minimal hypersurface
in compact symmetric space: Part II

November 23

- 9:50 - 10:50

Speaker: Wenjiao Yan (Beijing Normal University, China)

Title: Isoparametric foliation and complex structures

- 11:10 - 12:10

Speaker: Joseph Ansel Hoisington (Colby College, USA)

Title: Energy-minimizing maps of real and complex projective spaces

Lunch

- 14:00 - 14:50

Speaker: Naotoshi Fujihara (Tokyo University of Science, Japan)

Title: Mean curvature flows of graphs in warped products

- 15:10 - 16:00

Speaker: Daisuke Tarama (Ritsumeikan University, Japan)

Title: Left-invariant geodesic flows of Lie groups and free rigid body
Dynamics

- 16:20 - 17:10

Speaker: Giuseppe Pipoli (Univesità degli Studi dell'Aquila, Italy)

Title: Vanishing theorems for minimal stable hypersurfaces

(online talk)

Banquet

November 24

- 10:00 - 10:50

Speaker: Yasushi Homma (Waseda University, Japan)

Title: Weitzenböck formulas and their applications on quaternionic Kähler manifolds

- 11:00 - 11:50

Speaker: Masahiro Morimoto (Tokyo Metropolitan University, Japan)

Title: The parallel transport map over affine symmetric space

Photo

Lunch

- 13:30 - 14:20

Speaker: Kurando Baba (Tokyo University of Science, Japan)

Title: On construction of special Lagrangian submanifolds of the Atiyah-Hitchin manifold

- 14:30 - 15:20

Speaker: Kota Hattori (Keio University)

Title: The energy of smooth maps and Gibbons-Hawking metrics

- 15:30 - 16:20

Speaker: Toshihiro Shoda (Kansai University, Japan)

Title: On a set of index holomorphic map from a compact Riemann surface onto the two-sphere