

Submanifold Geometry, Lie Group Action and Its Applications to Theoretical Physics 2025

Date : November 22 - 24, 2025

**Place : Osaka Metropolitan University, Sugimoto Campus,
Building E, Room E408**

Program

November 22

- 9:55 - 10:00 Opening Ceremony
- 10:00 - 11:00
 Speaker: Xiaobo Liu (Peking University)
 Title: Mean Curvature Flow for Isoparametric Submanifolds in Hyperbolic Spaces
- 11:15 - 12:15
 Speaker: Kurando Baba (Tokyo University of Science)
 Title: On Backward Mean Curvature Flow for Equifocal Submanifolds in
 Symmetric Spaces of Compact Type

Photo & Lunch

- 14:00 - 15:00
 Speaker: Yuichiro Sato (Waseda University)
 Title: Construction of higher-dimensional vacuum solutions using
 almost abelian Lie groups
- 15:15 - 16:15
 Speaker: Yuuki Sasaki (Utsunomiya University)
 Title: Maximal antipodal sets of exceptional symmetric spaces
- 16:30 - 17:30
 Speaker: Osamu Ikawa (Kyoto Institute of Technology)
 Title: The intersection of two real flag manifolds in a complex flag Manifolds
 – An application of a canonical form of a compact symmetric triads -

November 23

- 9:50 - 10:50

Speaker: A Juncheol Pyo (Pusan National Univeristy)

Title: Translating Solitons for the Mean Curvature Flow

- 11:00 - 12:00

Speaker: Tomoki Fujii (Tokyo University of Science)

Title: Shapes of graphical solitons for the mean curvature flow
invariant under hyperpolar actions

Lunch

- 13:50 - 14:50

Speaker: Yuta Yamauchi (Yokohama National University)

Title: The total absolute curvature of submanifolds with singularities

- 15:00 - 16:00

Speaker: Shota Hamanaka (Osaka University)

Title: Covergence rate of geometric flows on weighted Riemannian manifolds

- 16:10 - 17:10

Speaker: Isami Koga (Kyushu International University)

Title: Equivariant harmonic maps of the quaternionic projective spaces
into Grassmann manifolds

Banquet(18:30~, at Namba)

November 24

- 10:00 - 11:00

Speaker: Martin Guest (Waseda University & NCST)

Title: A symplectic manifold arising in the theory of meromorphic connections
(online talk)

- 11:15 - 12:15

Speaker: Masahiro Morimoto (Tokyo Metropolitan University)

Title: Affine differential geometry of parallel transport maps and
weakly reflective submanifolds

Photo