



Singularity theory of differentiable maps and its applications

Date: December 16th, 2024 – December 18th, 2024

Venue: Room 420, Research Institute for Mathematical Sciences,
Kyoto University, Japan

HP : <https://www.fit.ac.jp/~fukunaga/conf/sing202412.html>

[Program]

December 16th (Monday)

- 10:30 – 11:20 Runa Shimada (Kobe University)
Geometric deformations of cuspidal S_1 singularities
- 13:30 – 14:20 Liang Chen (Northeast Normal University)
TBA
- 14:40 – 15:30 Hattori Yuki (Yokohama National University)
Intrinsic invariants of $(3, 4)$ –cuspidal edges
- 15:50 – 16:30 Yuta Yamauchi (Yokohama National University)
The total absolute curvature of submanifolds with singularities

December 17th (Tuesday)

- 9:30 – 10:20 Yashiro Kanon (Niigata university)
Morse bipersistence modules and rectangle barcodes
- 10:40 – 11:30 Shinichi Tajima (Niigata university)
Holonomic D-modules and singularities of holomorphic map germs
- 13:30 – 14:20 Goo Ishikawa (Hokkaido University)
Phase singularity and criticality
- 14:40 – 15:30 Nakatsuyama Nozomi (Muroran Institute of Technology)
Bertrand framed surfaces in the Euclidean 3-space and its applications
- 15:50 – 16:40 Yongqiao Wang (Dalian Maritime University)
On envelopes created by circle families in the plane

December 18th (Wednesday)

- 9:30 – 10:20 Naoki Kitazawa (Kyushu University)
Constructing real algebraic functions explicitly and their Reeb graphs
- 10:40 – 11:30 Takayuki OKUDA (Kogakuin University)
Morsification for degenerations of Riemann surfaces of genus 6
- 13:30 – 14:20 Kentaro Saji (Kobe University)
Normal form of D_4 minus singularity of fronts and its applications
- 14:40 – 15:30 Atsuki Hiramatsu (Saitama University)
Parallel Surface of Cuspidal Cross Cap
- 15:50 – 16:40 Mahito Kobayashi (Akita University)
Some pictorial reconstructions of the Boy surface

Sponsors: RIMS Symposia (open)

Organizers: Asahi Tsuchida (Shiga University) ,
Tomonori Fukunaga (Fukuoka Institute of Technology)