

# Singularity theory and differential geometry

## RIMS-Sing 3 Workshop



Date : November 7th (Monday), 2022 – November 9th (Wednesday), 2022

Venue : 7th floor, Research and Development Bureau, Saitama University, Japan.

HP : <http://www.math.kobe-u.ac.jp/HOME/saji/math/conf2022/spmon/index.html>

### [Program]

#### November 7th

10:40–11:30 Farid Tari (Universidade de São Paulo)

**On k-folding map-germs and hidden symmetries of surfaces  
in the Euclidean 3-space I**

13:30–14:20 Wojciech Domitrz (Politechnika Warszawska)

**On singularities of the Gauss map components of surfaces in  $\mathbb{R}^4$**

14:40–15:30 Farid Tari (Universidade de São Paulo)

**On k-folding map-germs and hidden symmetries of surfaces  
in the Euclidean 3-space II**

15:50–16:40 Masaaki Umehara (東京工業大学/Tokyo Institute of Technology)

**Maximal surfaces in Lorentz-Minkowski 3-space and related topics I**

#### November 8th

9:30–10:20 Federico Sánchez-Bringas (Universidad Nacional Autónoma de México)

**Branch points of isothermal surfaces in  $n$ -Euclidean space,  $n = 3, 4$  I**

10:40–11:30 Farid Tari (Universidade de São Paulo)

**On the multiplicity of umbilic points I**

13:30–14:20 Masaaki Umehara (東京工業大学/Tokyo Institute of Technology)

**Maximal surfaces in Lorentz-Minkowski 3-space and related topics II**

14:40–15:30 Daniel Dreibelbis (University of North Florida)

**Reconstructing surfaces from apparent contours**

15:50–16:40 Farid Tari (Universidade de São Paulo)

**On the multiplicity of umbilic points II**

## November 9th

- 9:30–10:20 Wojciech Domitrz (Politechnika Warszawska)  
**The geometry of improper affine spheres**
- 10:40–11:30 Farid Tari (Universidade de São Paulo)  
**Geometric deformations of parameterized plane curves I**
- 13:30–14:20 Federico Sánchez-Bringas (Universidad Nacional Autónoma de México)  
**Branch points of isothermal surfaces in  $n$ -Euclidean space,  $n = 3, 4$  II**
- 14:40–15:30 Daniel Dreibelbis (University of North Florida)  
**Direction fields defined by line bitangencies between surfaces**
- 15:50–16:40 Farid Tari (Universidade de São Paulo)  
**Geometric deformations of parameterized plane curves II**

\* All times are Japan Standard Time (JST).

### Organizers:

Kentaro Saji (Kobe University),  
Masatomo Takahashi (Muroran Institute of Technology),  
Minoru Yamamoto (Hirosaki University),  
Takahiro Yamamoto (Tokyo Gakugei University),  
Kaoru Ono (Kyoto University, Research Institute for Mathematical Sciences).