

RIMS Research Project 2020
RIMS Review Seminar
Symmetry and Stability
in Differential Geometry of Surfaces
Osaka City University and Online (Zoom)
February 14th – 16th, 2022

Organizers

Miyuki Koiso (IMI Kyushu University)
Shin Nayatani (co-chair, Nagoya University)
Yoshihiro Ohnita (chair, OCAMI Osaka City University)
Wayne Rossman (Kobe University)
Masashi Yasumoto (IMI Kyushu University)

Invited Speakers

Jaigyoung Choe (3 talks, KIAS, Korea)
Mikhail Karpukhin (3 talks, Caltech, USA)
Toshihiro Shoda (3 talks, Kansai University, Japan)
Takumi Gomyou (Nagoya University, Japan)
Yoshiki Jikumaru (IMI Kyushu University, Japan)
Eriko Shinkawa (AIMR Tohoku University, Japan)

Supports

- Research Institute for Mathematical Sciences
(Kyoto University, International Joint Usage/Research Center)
- RIMS Research Project 2020
Differential Geometry and Integrable Systems
- Mathematics of Symmetry, Stability and Moduli -



Contact

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Program

February 14th, 2022

9:50-10:00	Opening
10:00-11:00	Mikhail Karpukhin (Caltech, USA) Index of minimal surfaces in spheres and eigenvalues of the Laplacian (1)
11:20-12:20	Jaigyoung Choe (KIAS, Korea) On the periodic Plateau problem (1)
14:00-15:00	Toshihiro Shoda (Kansai University, Japan) Moduli theory of minimal surfaces in flat tori (1)
15:40-16:40	Takumi Gomyou (Nagoya University, Japan) Maximization of the first eigenvalue and embedding of a finite graph

February 15th, 2022

10:00-11:00	Mikhail Karpukhin (Caltech, USA) Index of minimal surfaces in spheres and eigenvalues of the Laplacian (2)
11:20-12:20	Jaigyoung Choe (KIAS, Korea) On the periodic Plateau problem (2)
14:00-15:00	Toshihiro Shoda (Kansai University, Japan) Moduli theory of minimal surfaces in flat tori (2)
15:40-16:40	Yoshiki Jikumaru (IMI Kyushu University, Japan) Geometry of hanging membranes from shell membrane theory and variational principle

February 16th, 2022

10:00-11:00	Mikhail Karpukhin (Caltech, USA) Index of minimal surfaces in spheres and eigenvalues of the Laplacian (3)
11:20-12:20	Jaigyoung Choe (KIAS, Korea) On the periodic Plateau problem (3)
14:00-15:00	Toshihiro Shoda (Kansai University, Japan) Moduli theory of minimal surfaces in flat tori (3)
15:40-16:40	Eriko Shinkawa (AIMR Tohoku University, Japan) Symmetry and stability of anisotropic double crystals
16:40-16:50	Closing