

Schoen Geometry: The Gyroid

Date: April 4–5, 2015

Venue: Room 104, A Hall (Faculty of Science)

Nara Women's University, Nara, Japan

Organizer: Tomonari Dotera (Kinki University) and

Junichi Matsuzawa (Nara Women's University)

Program

April 4 (Sat)

- 15 : 00–15 : 10 Yushu Matsushita (Nagoya University)
Opening Address
- 15 : 10–15 : 20 Tomonari Dotera (Kinki University)
Introduction of Alan Schoen
- 15 : 20–16 : 10 Alan Schoen (Carbondale, USA)
Crystal structures and periodic minimal surfaces
- 16 : 30–17 : 00 Hideo Aoki (University of Tokyo)
Electronic structure of electrons on G-surface

17 : 00–17 : 50 **Poster Session with drinks**

Room 141, C Hall (Faculty of Science)

- P1 Kei Iida (Kochi University)
The gyroid in nuclear pasta
- P2 Hiroto Shoji (Kyoto Prefectural University of Medicine)
Self-organized patterns in reaction-diffusion systems
- P3 Takahiro Ichikawa (Tokyo University of Agriculture and Technology)
Construction of Gyroid Nanostructures through Self-Organization of Well-Designed Liquid-Crystalline Molecules
- P4 Atsushi Takano (Nagoya University)
Microphase-separated structures constructed from ABC/ABA/CBC triblock copolymer blends
- P5 Yusuke Asai (Nagoya University)
Creation of Cylindrical Morphologies with New Self-assembly Manners from ABC Block Terpolymer Blends
- P6 Megumi Yoshida (Nagoya University)
Construction of co-continuous microphase-separated structures by block blends with hydrogen bonding interaction
- P7 Katsuhiko Yamamoto (Nagoya Institute of Technology)
Ordered Bicontinuous Double Diamond and Gyroid Structures in A-B/A Block Copolymer and homopolymer Blend
- P8 Tomonari Dotera and Junichi Matsuzawa (KU, NWU) Hard spheres on the gyroid surface
- P9 Yusuke Takahashi and Tomonari Dotera (KU) Hard spheres on the primitive surface
- P10 Hideaki Tanaka and Tomonari Dotera (KU) Hard spheres on the diamond surface

18:00–20 : 00 **Banquet**

April 5 (Sun)

- 9 : 30–10 : 00 Wayne Rossman (Kobe University)
Discrete triply periodic minimal surfaces
- 10 : 00–10 : 20 Masashi Yasumoto (Kobe University)
Discretized minimal surfaces
- 10 : 20–10 : 50 Udo Hertrich-Jeromin (Vienna University of Technology)
A Moebius geometer's view on minimal surfaces
- 11 : 10–11 : 40 Miyuki Koiso (Kyushu University), Toshihiro Shoda (Saga University)
and Paolo Piccione (University of Sao Paulo)
On bifurcation and local rigidity of triply periodic minimal surfaces in \mathbb{R}^3
- 11 : 40–12 : 10 Shoichi Fujimori (Okayama University)
Limits of triply periodic minimal surfaces of genus 3

12 : 10–13 : 10 **Lunch**

- 13 : 10–13 : 40 Yasuhiro Sakamoto (Osaka Univeristy)
Gyroid Structure in Mesoporous Silica System
- 13 : 40–14 : 10 Nobuhisa Fujita (Tohoku University)
Symmetry of electronic states constrained on periodic minimal surfaces
- 14 : 30–15 : 00 Shoichi Kutsumizu (Gifu Univeristy)
Molecular Arrangement in Gyroid Phase of Thermotropic Cubic Mesogen BABH
- 15 : 00–15 : 30 Ken'ichiro Nakazato (Tokyo University of Science)
Gyroid morphology in subsaturation nuclear matter
- 15 : 30–15 : 40 Alan Schoen
Closing Remarks