

November 20 (Wed)

15:20-17:20 Poster Session

Mathematics

- 1-1 Toky Andriamanalina** (University of Potsdam)
Unknotting 3-periodic entanglements of filaments and nets
- 1-2 Martha Dunham** (Independent Researcher)
Macro Scale Gyroid Applications
- 1-3 Hou-Hsun Ho** (National Taiwan University)
Discrete Gyroid Structures: Defect-Driven Tiling and Analogies with Zeolite Frameworks
- 1-4 Sonia Mahmoudi** (Tohoku University)
Construction and Classification of Hyperbolic Diagrams and their Triply Periodic Weavings & Polycatenanes via Mapping to the Gyroid
- 1-5 Yukihiro Nishikawa** (Kyoto Institute of Technology)
Curvature Estimation based on Distance Conversion of a 3D image

Physics

- 2-1 Greg Grason** (University of Massachusetts Amherst)
Design economy and assembly of size-programmable triply-periodic polyhedra from addressable nanotriangles
- 2-2 Matthias Himmelmann** (University of Potsdam)
Exploring the Homogeneity of Disordered Minimal Surfaces
- 2-3 Suman Kulkarni** (University of Pennsylvania)
On characterizing the topology and geometry of imperfect gyroids.
- 2-4 Vira Raichenko** (University of Potsdam)
Cocoon Microstructures through the Lens of Topological Persistence
- 2-5 Hideaki Tanaka** (Sango Co., Ltd.)
Programmable Self-Assembly of Nanoplates into Bicontinuous Nanostructures
- 2-6 Kana Yamamoto** (Kindai University)
Hexagulation numbers: magic numbers on the gyroid surfaces

Chemistry

- 3-1 Noriyoshi Arai** (Keio University)
Molecular understanding of mechanical properties of Archimedean tiling through star terpolymer thin film
- 3-2 Yifei Cheng** (Fudan University)
Understand the Relative Stability of Single-Gyroid to Double-Gyroid in AB-type Block Copolymer
- 3-3 Qingshu Dong** (Fudan University)
Hybrid Structures Formed by Asymmetric ABC-type Block Copolymers

- 3-4 Takashi Honda** (Ochanomizu University)
Molecular Weight Dependence of Domain Spacing in the Double Gyroid Structure of ABC Triblock Copolymers
- 3-5 Shuto Ito** (Biomatter Lab)
Polymer Membrane Tensegrity: Inverse Design of Polymer Films Morphing into Arbitrary 3D Surfaces with Digital Photopatterning Technique
- 3-6 Shinichi Sakurai** (Kyoto Institute of Technology)
Changes in two-dimensional small-angle X-ray scattering pattern by uniaxial stretching of a double-gyroid block copolymer
- 3-7 Qingliang Song** (Fudan University)
Hierarchical Self-assembly Behaviors of ABC-Type Bottlebrush Copolymers
- 3-8 Jiro Suzuki** (High Energy Accelerator Research Organization (KEK))
Gyroid Interface from Symmetric ABCD Tetrablock Quarterpolymers by Monte Carlo Simulation
- 3-9 Naoya Torikai** (Mie University)
Interfacial Segment Distribution of a Diblock Copolymer in a Polymer Thin Film
- 3-10 Xintong You** (Fudan University)
Hierarchical gyroid structures in frustrated ABC triblock copolymers
- 3-11 Xiangbing Zeng** (University of Sheffield)
Stage-wise Pre-assembly in Melt Prior to Liquid Crystals

Biology

- 4-1 Chisaki Kitajima** (Kyushu University)
Structures made by termites and spiders
- 4-2 Allan Millstead** (Murdoch University)
*Order and disorder of the microstructures of the *Cidaris rugosa* sea urchin stereom*
- 4-3 Ryosuke Ohnuki** (Tokyo University of Science)
*Chirality of gyroid-type photonic crystals in the scale of *Teinopalpus Imperialis**

Engineering

- 5-1 Abdulaziz Alsenafi** (Kuwait University)
Non-Fourier Computations of Heat and Mass Transport in Nanoscale Solid-Fluid Interactions Using the Galerkin Finite Element Method
- 5-2 Ziad Saghir** (Toronto Metropolitan University)
Heat enhancement using Gyroid Structure and metal foam for Different Porosity and Cooling fluids: Experimental and Numerical Approaches
- 5-3 Kaixin Yan** (Beihang University)
Coupling Additive Manufacturing with Triply Periodic Minimal Surface Enable Next-Generation Aero-Engine Heat Exchangers
- 5-4 Takumi Yano** (Kindai University)
Sound Insulation Properties of Gyroids at Normal Incidence