

November 20 (Wed)

Poster Session

15:20-17:20

Poster size: A0 (board width 900 mm)

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*](#)