

**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*

### ***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 Millsted** (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*