November 20 (Wed) 15:20-17:20

Poster Session 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 Millsteed (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 Imeperialis

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