

Symposium Aspects of Generalized Symmetries

The concept of symmetry has long been a foundational principle in modern physics, providing a framework for classifying and understanding diverse physical systems based on shared invariances. Recently, the discovery of generalized symmetries has extended this framework, offering fresh insights across condensed matter physics, high-energy physics, quantum information, and mathematics.

These symmetries go beyond conventional definitions, revealing new phases of matter and providing powerful tools for exploring complex phenomena such as fracton orders, categorical symmetries, non-invertible symmetries, and UV/IR mixing in field theories.

Scientific Organizers

Danny Bulmash (United States Naval Academy)
Abhinav Prem (Institute for Advanced Study)
Masahito Yamazaki (The University of Tokyo)
Han Yan (The University of Tokyo)
Yizhi You (Northeastern University)

Monday, June 16, 2025 to Friday, June 20, 2025

OIST Lab 5 D23 seminar room

Registration required



*This symposium is part of the TSVP Thematic Program "Generalized Symmetries in Quantum Matter". The program will run from May 12 to July 5, 2025.