Mathematical Physics Faculty of Physics Boltzmanngasse 5 1090 Vienna, Austria



# ΙΝΥΙΤΑΤΙΟΝ

### as part of the Mathematical Physics Theory Seminar

to the talk by

## Konstantin WERNLI

(University of Southern Denmark)

on

### "Perturbative TQFTs"

#### Abstract:

Topological Quantum Field Theories (TQFTs) were axiomatized by Atiyah as symmetric monoidal functors whose domain is a cobordism category. On the other hand, recently developed methods allow for perturbative quantization of field theories on manifolds with boundary.

I will review these concepts and then sketch a research program to build a bridge between them, discussing the example of Chern-Simons theory in some detail. One of the goals of this activity is to open new avenues towards the Asymptotic Expansion Conjecture.

Time: Tuesday, 13 May 2025, 2:00 p.m.

Location: Erwin-Schrödinger Lecture Hall, 1090 Vienna, Boltzmanngasse 5, 5th floor