Mathematical Physics Faculty of Physics Boltzmanngasse 5 1090 Vienna, Austria



# ΙΝΥΙΤΑΤΙΟΝ

### as part of the Mathematical Physics Theory Seminar

to the talk by

## **Vincentas MULEVICIUS**

(University of Vienna)

on

### "Topological features in lattice models"

#### Abstract:

In this talk I will give an introduction to simple lattice systems having topological properties, in particular the Kitaev's toric code and its generalisations - the Levin-Wen models. Using these models as an example we will also discuss topological phases of matter and how they are related with quantum memory, quantum computing and topological quantum field theories.

If time permits, I will also describe the role of non-invertible symmetries in these models and how they can be used to `engineer' new topological phases out of a given one.

Time: Tuesday, 14 January 2025, 2:00 p.m.

Location: Erwin-Schrödinger Lecture Hall, 1090 Vienna, Boltzmanngasse 5, 5<sup>th</sup> floor

sgd. S. Fredenhagen, M. Sperling