



*Leonhard Euler  
International Mathematical Institute  
in Saint Petersburg*



Mathematics &  
Computer Science  
Department

## **EIMI SEMINAR**

🕒 Thursday 25 Nov 2021, 17:15 → 18:15

📍 Room 301 (SPbU, Dept. of Mathematics & Computer Science)

**Alexander Glazman**



### **Phase transitions in two dimensions**

Euler International Mathematical Institute is happy to announce a talk «Phase transitions in two dimensions», given by Dr. Alexander Glazman.

#### Abstract

Phase transitions are natural phenomena when a small change of external parameter, like temperature, leads to a drastic change of the properties of the material: ice melting to water, ferromagnets becoming paramagnets above the Curie temperature, etc. To study these phenomena, one introduces lattice models - particles are placed in a lattice and only adjacent particles interact. In two dimensions, this leads to beautiful conjectures of universality and conformal invariance, with random fractal SLE curves appearing in the limit.

The talk aims to describe some of the classical results and the state of the art in the area now. If time permits, we will also discuss the main ideas in the proofs.

Everyone is welcome!