

An introduction to lattice gauge theories

Monday, May 12, 2025 9:05 AM (55 minutes)

Lattice gauge theories are higher dimensional analogs of famous models such as the Ising model, the XY model, and the clock model. At the same time, they are extremely well-studied models in the physics literature as they are discretizations of the Yang-Mills model in physics, which describes the standard model. In this mini-course, we will introduce lattice gauge theories, discuss and deduce some of their properties, and contrast this to the behavior of, e.g., the Ising model.

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