

Discrete conformal symmetry and integrable spin chains

Monday 16 June 2025 16:15 (15 minutes)

It has been a long-standing problem in quantum integrability whether Reshetikhin's condition, which provides a three-local conserved charge, implies the existence of sufficient many mutually commuting local charges that guarantee integrability. In an attempt to answer this question, I reveal the discrete conformal algebra hidden in Yang-Baxter integrable 1D systems, and propose a practical method to iteratively identify new integrable models and construct the corresponding R-matrices for their classical statistical mechanical counterparts.

Author: ZHANG, Zhao (University of Oslo)

Presenter: ZHANG, Zhao (University of Oslo)

Session Classification: Parallell B1