

Workshop on Integrability



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Type: 40 Min Talk

The open $U(\mathfrak{sl}(2))$ -invariant staggered six-vertex model and the CFT behind it

Tuesday, 29 March 2022 10:00 (1 hour)

The finite-size spectrum of the critical alternating \mathbb{Z}_2 -staggered spin-1/2 XXZ model with quantum group invariant boundary conditions is presented. For all values of the staggering parameter the continuum limit has been found to be described in terms of the non-compact $SU(2, \mathbb{R})/U(1)$ Euclidean black hole conformal field theory (CFT) whose scaling dimensions include a continuous component. In addition, we find that levels from the discrete part of the spectrum of this CFT emerge as the anisotropy is varied. The finite size amplitudes of both the continuous and the discrete levels are related to the corresponding eigenvalues of a quasi-momentum operator which commutes with the Hamiltonian and the transfer matrix of the model.

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Track Classification: Participants Talks: Abstracts of Participants Talks