

On instability of interface and absence of non-periodic ground states for the Antiferromagnetic XXZ chain

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Abstract

In this talk, we review recent results on instability of interface for the Antiferromagnetic XXZ chain (the XXZ quantum spin model on a one-dimensional lattice). The spectrum of the infinite volume Hamiltonian in a soliton sector is studied and we show absence of non-periodic infinite volume ground states for the model with large Ising like anisotropy.