



量子物理学・ナノサイエンス第 96 回特別セミナー

## The Iso-BAE Flows

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- 場所** : 本館1階 M-155 講義室

### 概要

Deformations of quantum many-body systems typically change the spectrum and physical properties. In this talk, I will explain a family of deformations, dubbed iso-BAE flow, that preserves part of the many-body spectrum for quantum integrable spin chains, which are strongly interacting and exactly solvable. I will use the spin-1/2 XXX model with open boundaries to demonstrate the phenomenon. The deformation changes the boundary magnetic fields, while leaving the Bethe Ansatz equations intact. The Hilbert space is divided into two parts, one invariant under the flow (type-I), while the other varying along the flow (type-II). The type-I states are protected by an emergent symmetry. If time permits, I will explain some physical applications of the iso-BAE flows.

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