

Student Workshop on Integrability

Report of Contributions

Contribution ID: 3

Type: **not specified**

Exact quantum state preparation

This course is an introduction to some approaches for exactly preparing multi-qubit states on a quantum computer. In Lecture 1, we begin with a brief review of quantum circuits; we then consider the GHZ state, and its preparation in constant depth. In Lecture 2, we introduce matrix product states and sequential state preparation; we consider the example of AKLT states, and their preparation in constant depth. In Lecture 3, we consider the preparation of Dicke states and Bethe states.

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Presenter: NEPOMECHIE, Rafael (University of Miami)

Contribution ID: 4

Type: **not specified**

Quantum non-equilibrium dynamics with classical determinist circuits

TBA

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Contribution ID: 5

Type: **not specified**

Exact out-of-equilibrium dynamics with random unitary circuits

TBA

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