Contribution ID: **1** Type: **Oral**

Entanglement of formation of mixed many-body quantum states using tensor networks

Friday, 2 October 2020 14:00 (15 minutes)

In this talk, we will present an algorithm to compute the entanglement of formation for mixed many-body quantum states by using tensor networks. Indeed, we will introduce a new tensor network ansatz — the Tree Tensor Operator — which leads to a very convenient description of density matrices. Our results will focus on thermal states of the quantum Ising chain in transverse field, for which we could consider up to 22 spins.

Presenter: ARCECI, Luca (Università di Padova)

Session Classification: Invited