



## Physical Sciences Seminar

# Continuous tensor networks and entanglement renormalization

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Host: Maksym Serbyn

Tensor networks are computational tools for quantum many-body physics inspired by our knowledge of their entanglement properties. The research program of continuous tensor networks aims to apply tensor network techniques directly in the continuum, in the setting of quantum field theory. This talk will be a (partial) overview of the field, intended for a broad, non-expert audience. We will specifically focus on the continuous multiscale entanglement renormalization ansatz (cMERA), a variational wavefunctional for quantum field theoretic ground states, which is inspired by the concept of entanglement renormalization. Time permitting we will review related constructions.

**Tuesday, January 14, 2020 11:00am - 12:00pm**

Heinzel Seminar Room / Office Bldg West (I21.EG.101)



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: <https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.