



Mathematics and CS Seminar

Quantum Boltzmann dynamics in Fermi gases

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Host: Robert Seiringer

The derivation of the quantum Boltzmann equation is an open problem in mathematical physics, with at least forty years of history. In parallel, the understanding of large quantum systems in the mean-field scaling regime has grown tremendously, and has led to the rigorous implementation of key physical ideas. Among them, is the “bosonization” of systems of fermions at low temperatures. In this talk, I present new results for dense, weakly interacting Fermi gases, in which the emergence of quantum Boltzmann dynamics is linked to this bosonization phenomenon. This talk is based on joint work with Thomas Chen.

Tuesday, November 7, 2023 04:15pm - 05:15pm

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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