Contribution ID: **8** Type: **20 Min Talk**

Finite temperature spin diffusion in the Hubbard model in the strong coupling limit

Monday, 3 July 2023 10:00 (30 minutes)

We investigate finite temperature spin transport in one spatial dimension by considering the spin-spin correlation function of the Hubbard model in the limiting case of infinitely strong repulsion. We find that in the absence of bias the transport is diffusive, and derive the spin diffusion constant. Our approach is based on asymptotic analysis of a Fredholm determinant representation, which is entirely analytic and free of phenomenological assumptions of Generalized Hydrodynamics.

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