



## Mathematics and CS Seminar

# Microscopic derivation of the Fröhlich Hamiltonian for the Bose polaron in the mean-field limit

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Host: Robert Seiringer

We consider the quantum mechanical many-body problem of a single impurity particle immersed in a weakly interacting Bose gas. The impurity interacts with the bosons via a two-body potential. We study the Hamiltonian of this system in the mean-field limit and rigorously show that, at low energies, the problem is well described by the Fröhlich polaron model. In collaboration with Robert Seiringer.

**Thursday, November 26, 2020 04:15pm - 05:15pm**

Online via Zoom



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.