



## Mathematics and CS Seminar

# The Bose gas with a short-range impurity potential

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Host: Robert Seiringer

We consider the local perturbation of a Bose gas by an immobile impurity. We start with the simplest case of a non-interacting gas, for which the Schrödinger equation can be solved explicitly. A new method is provided, which allows to obtain many-body observables such as the spectral function. If time permits, we will eventually discuss ongoing work on the interacting gas, where a Jastrow-like ansatz hints at an anomalous scaling of the ground-state energy

**Tuesday, May 7, 2024 04:30pm - 05:30pm**

Office Bldg West / Ground floor / Heinzl Seminar Room (I21.EG.101)



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