



## Mathematics and CS Seminar

# Upper bound for the energy of a confined gas of hard sphere bosons

**Benjamin Schlein (University of Zürich)**

**Host: Laszlo Erdős**

We prove an upper bound for the ground state energy of a confined gas of  $N$  bosons, optimal up to errors vanishing as  $N$  tends to infinity. We consider particles moving on the three-dimensional unit torus, interacting through a hard sphere potential with radius of order  $1/N$  (Gross-Pitaevskii regime). This is joint work with G. Basti, S. Cenatiempo, A. Olgiati and G. Pasqualetti.

**Thursday, December 2, 2021 04:15pm - 05:15pm**

IST Austria Campus Online via Zoom



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