

# **Towards microscopic optical potentials using effective Hamiltonians derived from DFT calculations**

*Thursday 28 October 2021 16:15 (25 minutes)*

During this talk I will present some recent development for the computation of nucleon-nucleus optical potentials using effective Hamiltonians constructed from a mapping of DFT's results. More precisely, I will focus on the challenge related to the accurate calculations of overlaps in Hartree-Fock-Bogoliubov based theories and present a recently-published formula (B. G. Carlsson and J. Rotureau PRL 126 2021), which allows for precise and numerically stable computations in this context.

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