



Einladung zum
Physikalischen Kolloquium
Wintersemester 2022/2023

Physikzentrum der Technischen Universität Braunschweig

Prof. Dr. Volker Bach

(TU Braunschweig)

will give a talk on

November 1st, 16:45, MS 3.1

**Hartree-Fock Theory and its
Generalizations**

In the talk the Hartree-Fock (HF) approximation in quantum mechanics will be reviewed. The following particular aspect will be discussed:

- Accuracy of the HF approximation,
- Lieb's variational principle and its generalizations,
- generalized HF approximation,
- symmetries and restricted HF approximation.