



CRC 1227
Designed Quantum States of Matter



GUEST LECTURE

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(Guest of Prof. P. Schmidt and Prof. K. Hammerer)

Leibniz Universität Hannover

DQ-mat Colloquium

20 October 2022, 4.00 pm

(Room D326, Welfengarten 1)

"Dipolar quantum droplets and supersolids"

Dipolar interactions are fundamentally different from the usual van der Waals forces in real gases. Besides its anisotropy the dipolar interaction is nonlocal and as such allows for self organized structure formation, like in many different fields of physics. Although the bosonic dipolar quantum liquid is very dilute, stable droplets and supersolids as well as honeycomb or labyrinth patterns can be formed due to the presence of quantum fluctuations beyond the mean field theory.

All DQ-mat members and all interested are cordially invited to attend.