



Mini-Workshop “Analysis of PDEs”  
March 27th - March 31st, 2023

**14:00 - 15:00 pm, Wednesday, March 29th 2023**  
**Seminar room: SR 1.067, Math Building 20.30**

Spectral summability for the quartic oscillator and applications to the Engel group

Hajer Bahouri (CNRS & Sorbonne University)

**Abstract**

The aim of this joint work with Davide Barilari, Isabelle Gallagher and Matthieu Léautaud consists to establish a spectral summability for the quartic oscillator, then to apply it to study the Engel group  $G$  which is a step-3 stratified Lie group. In particular, the influence of the geometry of  $G$  on dispersion phenomena for the Schrodinger equation is investigated.