



Analysis Seminar

Title: A Journey Through Quantum Operator Theory

Speaker: Michael Melgaard (University of Sussex)

Date: Tue 24th March 2026 at 3:00PM

Location: E0.32 (beside Pi restaurant)

Abstract: Quantum operator theory, i.e., the study of the analytical properties of mathematical models in quantum theory, is one of the most successful endeavours in modern science. In this talk I give an introduction to the main questions, sprinkled with numerous examples, addressing localization of essential spectrum, eigenvalue asymptotics, phase space bounds (used in, e.g. stability of matter), quantum dynamics (Bohr's correspondence principle and Egorov's theorem), and in particular, resonances (e.g., resonance expansions).

<https://ucd-ie.zoom.us/j/68225934877>

<https://ucd-ie.zoom.us/j/68225934877>