



MAFIA - the seminar you can't refuse

Quantum tunneling in deep potential wells and strong magnetic field

Bernard Helffer

Nantes Université

March 5, 2024 12:00–13:00 in T212

Fakulta jaderná a fyzikálně inženýrská ČVUT Trojanova 13, 12000 Praha

Abstract: Inspired by a recent paper by Charles Fefferman, Jakob Shapiro and Michael Weinstein (2022), we investigate quantum tunneling for a Hamiltonian with a symmetric double well and a uniform magnetic field. In the simultaneous limit of strong magnetic field and deep potential wells with disjoint supports, tunneling occurs and we derive accurate estimates of its magnitude.

This is a joint work with A. Kachmar (2023) recently improved by L. Morin (2023).