



MAFIA - the seminar you can't refuse

## **Magnetic WKB constructions on a surface.**

**Tho Nguyen Duc**

ČVUT v Praze

**June 30**, 2020

**13:15–14:15**

**in T112**

Fakulta jaderná a fyzikálně inženýrská ČVUT  
Trojanova 13, 12000 Praha

**Abstract:** In this presentation, we consider the magnetic Dirichlet Schrödinger operator at the semi-classical level on a Riemannian surface. When the magnetic field attains a unique positive and non-degenerate minimum, WKB analysis will be used to investigate the spectral problem of the operator. The exponential decay of eigenfunctions is also mentioned in this talk. Furthermore, the eigenfunctions are very well approximated in an exponentially weighted space.