



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

16:30 - 17:30 pm, Thursday, March 30th 2023
Seminar room: SR 1.067, Math Building 20.30

Ekman boundary layers and topography

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Abstract

In this talk, we study the asymptotic of incompressible weakly viscous and fast rotating fluids. We try to study the problem with a fixed topography, possibly with emerged lands. We first put in light the fact that the Taylor-Proudman theorem induces a very strong constraint on possible weak limit. This lead us to make strong simplification: we assume that the topography is radially symmetric and treat the linear problem in this framework in the case of a (very) well prepared initial data.