



Seminar/Talk

Solutions of the semigeostrophic equation on a rotating sphere

Lauro Silini

ETH Zürich

Host: Jan Maas

Hoskins' semigeostrophic equation is one of the most effective meteorological model that represents the formation of transported interfaces (frontogenesis) over the earth. We will present its surprising connection with the theory of optimal transportation when studied in the periodic and flat case, and highlight the major difficulties to extend this argument in the curved setting. We prove local-in-time existence of smooth solutions in subdomains of a rotating sphere taking advantage of an alternative approach based on peculiar cancellation properties intrinsic in the equation's structure.

Tuesday, December 19, 2023 04:15pm - 05:15pm

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.