



Seminar/Talk

Linear Stability of the self-similarly shrinking lens

Theresa Simon

University of Münster

Host: Julian Fischer

When performing a blowup analysis of singularities in 2D multiphase mean curvature flow, one is led to the notion of self-similar shrinker: Networks whose evolution by mean curvature is given by shrinking homotheties. It can be shown that they are critical points of the interface length functional with a Gaussian weight. Furthermore, this weighted length is decreased during the flow. Hence the dynamic stability of the shrinkers can be studied via stability of the weighted length functional, a matter that is complicated by the existence of, generically, four unstable modes arising from dilation, translation, and rotation. In the talk, I will demonstrate how to perform a linear stability analysis of self-similar shrinkers for the example of the lens.

Tuesday, March 11, 2025 04:00pm - 05:00pm

Office Bldg West / Ground floor / Heinzl Seminar Room (I21.EG.101)



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.