Universität Hamburg
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Fakultät für Mathematik, Informatik
und Naturwissenschaften (MIN)

Fachbereich Mathematik

Announcement

Guest Lecture in Research Seminar on Calculus of Variations

Speaker: Prof. Dr. Vesa Julin (University of Jyvaskyla)

Title: Eventual regularity of the volume-preserving mean curvature flow

Abstract: I will consider flat flow solution to the volume-preserving mean curvature flow constructed via the minimizing movements scheme. It is known that in 3D, such flows converge (up to translation of the components) to a union of spheres, and when the flow converges to a single sphere, this convergence is exponential in Hausdorff. I will present a regularity result showing that, in the latter case, the flow eventually becomes smooth and converges exponentially fast in C^k-norm, for all k, to the sphere. A key technical novelty is a version of Brakke's epsilon-regularity theorem adapted to our setting. This is a joint work with Vedansh Arya (Kanpur, India) and Seongmin Jeon (Seoul, Korea).

Time: Tuesday, June 16, 2026, 04:00 p.m.

Location: MIN Forum, Room 4.2

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