Universität Hamburg
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Lothar-Collatz-Kolloquium für Angewandte Mathematik

Donnerstag, den 07. November 2024, um 17:15 Uhr, im Hörsaal 5

Prof. Dr. Christof Melcher[*]
(RWTH Aachen, Lehrstuhl für Angewandte Analysis)

"Deterministic and stochastic Landau-Lifshitz-Gilbert equations"

Zusammenfassung/Abstract:

We shall discuss well-posedness in the framework scaling critical Sobolev spaces that feature a threshold conditions for the occurrence of topological singularities. For the stochastic equation, we focus on the energy-critical 2D case and discuss a probabilistic version of the bubbling scenario and Struwe-type solutions. The method is based on a Doss-Sussmann transformation that yields a covariant form of the LLG with random coefficients. This is joint work with Ben Goldys and Chunxi Jiao.

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