
Hysteresis for the Landau-Lifshitz model

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Résumé

Memory effects are observed on ferromagnets, when some time varying magnetic field is applied. The magnetization evolution of such a material is described by the so-called Landau-Lifshitz equation, which is a parabolic, quasilinear and degenerate PDE.

I shall show that a two-scale analysis reveals hysteresis phenomena for this equation. This is joint work with Elise Fouassier (Lyon) and Stéphane Labbé (Grenoble).

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