

## Karlsruher PDE-Seminar

# Existence of Defects in Swift-Hohenberg Equations

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We show the existence of grain boundaries and dislocations in the classical Swift-Hohenberg equation and in an anisotropic Swift-Hohenberg equation, respectively. We find these defects as traveling waves connecting roll patterns with different wavenumbers. The analysis relies upon a spatial dynamics formulation of the bifurcation problem, a local center-manifold reduction, and normal form theory.

**Termin:** Donnerstag, 17. Juli 2014, 17:30 Uhr

**Ort:** 1C-03, Allianz-Gebäude 05.20

**Gastgeber:** Die Dozenten des Schwerpunkts Partielle Differentialgleichungen