

Boğaziçi Math Seminar

The Cahn-Hilliard equation with a nonlinear source term

Alain Miranville
Le Havre Normandy University

Abstract:

Our aim in this talk is to prove the existence of solutions to the Cahn-Hilliard equation with a general nonlinear source term. Considering logarithmic nonlinear terms, we give sufficient conditions on the source term that ensure the existence of a global in time weak solution. These conditions are satisfied by several important models and applications that can be found in the literature.

Date : Wednesday, April 15, 2026

Time: 13:30

Place: TB 130, Boğaziçi University