

Γ -EXPANSION OF THE CAHN-HILLIARD FUNCTIONAL WITH DIRICHLET BOUNDARY CONDITIONS

Speaker: Leonard Kreutz

Abstract: In this talk, we present the second-order asymptotic development of the Cahn-Hilliard functional under Dirichlet boundary conditions via Γ -convergence. We begin by reviewing results from the literature on the asymptotic expansion of the Cahn-Hilliard functional. Subsequently, we discuss our ongoing research focused on the Cahn-Hilliard functional with Dirichlet boundary conditions. In particular, we examine the case where no interior interfaces are present and highlight several open questions for future investigation. This seminar is based on work in collaboration with Irene Fonseca and Giovanni Leoni.