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Second-Order Gamma Limit for the Cahn-Hilliard Functional.

The Cahn–Hilliard functional models phase transitions in a variety of physical settings. This talk will discuss the resolution of a long standing open problem, namely, the asymptotic development of order 2 by \( \Gamma \)-convergence of the mass-constrained Cahn–Hilliard functional. This is achieved by introducing a novel rearrangement technique, which works without Dirichlet boundary conditions.