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Nota di contenuto	Preface; Contents; Bifurcation Problems for Ginzburg-Landau Equations and Applications to Bose-Einstein Condensates; Vortex Analysis of the Ginzburg-Landau Model of Superconductivity; On Singular Perturbation Problems Involving a "Circular-Well" Potential; Existence Results on Ginzburg-Landau Equations; A Survey on Ginzburg-Landau Vortices of Superconducting Thin Films*; On the Hydro-dynamic Limit of Ginzburg-Landau Wave Vortices; Singular Sets of the Landau-Lifshitz System*; Analysis of Ginzburg-Landau Models for Type I Superconductivity*; Ferromagnets and Landau-Lifshitz Equation
Sommario/riassunto	The Ginzburg-Landau equation as a mathematical model of superconductors has become an extremely useful tool in many areas of physics where vortices carrying a topological charge appear. The remarkable progress in the mathematical understanding of this

equation involves a combined use of mathematical tools from many branches of mathematics. The Ginzburg-Landau model has been an amazing source of new problems and new ideas in analysis, geometry and topology. This collection will meet the urgent needs of the specialists, scholars and graduate students working in this area or related areas.

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