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Titolo	Solvability, Regularity, and Optimal Control of Boundary Value Problems for PDEs : In Honour of Prof. Gianni Gilardi // edited by Pierluigi Colli, Angelo Favini, Elisabetta Rocca, Giulio Schimperna, Jürgen Sprekels
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Soggetti	Differential equations, Partial Calculus of variations Mathematical physics Partial Differential Equations Calculus of Variations and Optimal Control; Optimization Mathematical Physics Mathematical Applications in the Physical Sciences
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1 Rate of convergence for eigenfunctions of Aharonov-Bohm operators with a moving pole -- 2 Nondecreasing solutions to doubly nonlinear equations -- 3 Identification problems for degenerate integro-differential equations -- 4 A phase transition model describing auxetic materials -- 5 Global well-posedness for a phase transition model with irreversible evolution and acceleration forces -- 6 Perimeter symmetrization of some dynamic and stationary equations involving the Monge-Ampere operator -- 7 Optimal boundary control of a nonstandard Cahn–Hilliard system with dynamic boundary condition and double obstacle inclusions -- 8 Nontrivial solutions of quasilinear elliptic equations with natural growth term -- 9 On a diffuse interface model for tumour growth with non-local interactions and degenerate mobilities -- 10 A boundary control problem for the equation and dynamic boundary condition of Cahn–Hilliard type -- 11 New class of doubly nonlinear evolution equations governed by time-dependent

subdifferentials -- 12 Boundedness of solutions to a degenerate diffusion equation -- 13 Optimal a priori error estimates of parabolic optimal control problems with a moving point control -- 14 A note on the feedback stabilization of a Cahn–Hilliard type system with a singular logarithmic potential -- 15 Mathematical analysis of a parabolic-elliptic model for brain lactate kinetics -- 16 Weak formulation for singular diffusion equation with dynamic boundary condition -- 17 Smooth and broken minimizers of some free discontinuity problems -- 18 Stability results for abstract evolution equations with intermittent time-delay feedback -- 19 From visco-energetic to energetic and balanced viscosity solutions of rate-independent systems -- 20 A duality approach in some boundary value problems -- 21 On the structural properties of nonlinear flows.

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## Sommario/riassunto

This volume gathers contributions in the field of partial differential equations, with a focus on mathematical models in phase transitions, complex fluids and thermomechanics. These contributions are dedicated to Professor Gianni Gilardi on the occasion of his 70th birthday. It particularly develops the following thematic areas: nonlinear dynamic and stationary equations; well-posedness of initial and boundary value problems for systems of PDEs; regularity properties for the solutions; optimal control problems and optimality conditions; feedback stabilization and stability results. Most of the articles are presented in a self-contained manner, and describe new achievements and/or the state of the art in their line of research, providing interested readers with an overview of recent advances and future research directions in PDEs.

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