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Titolo	Partial differential equations : theory, control and approximation : in honor of the scientific heritage of Jacques-Louis Lions // Philippe G. Ciarlet, Tatsien Li, Yvon Maday, editors
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Control and Nash Games with Mean Field Effect -- The Rain on Underground Porous Media Part I: Analysis of a Richards Model -- Finite Volume Multilevel Approximation of the Shallow Water Equations -- Non-gaussian Test Models for Prediction and State Estimation with Model Errors -- Asymptotic Analysis in a Gas-Solid Combustion Model with Pattern Formation -- Implicit Sampling, with Application to Data Assimilation -- Periodic Homogenization for Inner Boundary Conditions with Equi-valued Surfaces: the Unfolding Approach -- Global Null Controllability of the 1-Dimensional Nonlinear Slow Diffusion Equation -- Sharp Interpolation Inequalities on the Sphere: New Methods and Consequences -- On the Numerical Solution to a Nonlinear Wave Equation Associated with the First Painlev'e Equation: an Operator-Splitting Approach -- MsFEM `a la Crouzeix-Raviart for Highly Oscillatory Elliptic Problems -- Exact Synchronization for a Coupled System of Wave Equations with Dirichlet Boundary Controls -- Mixing Monte-Carlo and Partial Differential Equations for Pricing Options -- Increasing Powers in a Degenerate Parabolic Logistic Equation -- Composite Waves for a Cell Population System Modelling Tumor Growth and Invasion.
Sommario/riassunto	This book collects papers mainly presented at the "International Conference on Partial Differential Equations: Theory, Control and Approximation" (May 28 to June 1, 2012 in Shanghai) in honor of the scientific legacy of the exceptional mathematician Jacques-Louis Lions.

The contributors are leading experts from all over the world, including members of the Academies of Sciences in France, the USA and China etc., and their papers cover key fields of research, e.g. partial differential equations, control theory and numerical analysis, that Jacques-Louis Lions created or contributed so much to establishing.
