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Nota di contenuto	Preface -- I Inverse problems and related topics for partial differential equations: 1. Jin Cheng, Mourad Choulli and Shuai Lu, An inverse conductivity problem in multifrequency electric impedance tomography -- 2. Piermarco Cannarsa and Cristina Urbani, Superexponential stabilizability of degenerate parabolic equations via bilinear control -- 3. Michel Cristofol and Lionel Roques, Simultaneous determination of two coefficients in Itô diffusion processes-theoretical and numerical approaches -- 4. Victor Isakov and Shuai Lu, On the inverse source problem with boundary data at many wave numbers -- 5. Guanghui Hu, Yikan Liu and Masahiro Yamamoto, Inverse moving source problem for fractional diffusion(-wave) equations: determination of orbits -- 6. O. Yu. Imanuvilov and M. Yamamoto, Inverse problems for a compressible fluid system -- 7. Xinchu Huang, Carleman estimate for a general second-order hyperbolic equation -- II Regularization theory of inverse problems: -- 8. Bernd Hofmann and Peter Mathé, A priori parameter choice in Tikhonov regularization with oversmoothing penalty for non-linear ill-posed problems -- 9. Daniel Gerth, Bernd Hofmann and

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Sommario/riassunto

This volume contains 13 chapters, which are extended versions of the presentations at International Conference on Inverse Problems at Fudan University, Shanghai, China, October 12-14, 2018, in honor of Masahiro Yamamoto on the occasion of his 60th anniversary. The chapters are authored by world-renowned researchers and rising young talents, and are updated accounts of various aspects of the researches on inverse problems. The volume covers theories of inverse problems for partial differential equations, regularization methods, and related topics from control theory. This book addresses a wide audience of researchers and young post-docs and graduate students who are interested in mathematical sciences as well as mathematics.

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