1. Record Nr. UNINA9910484317203321 Anomalies in partial differential equations / / Massimo Cicognani [and **Titolo** three others], editors Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021] ©2021 **ISBN** 3-030-61346-1 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIII, 467 p. 22 illus., 12 illus. in color.) Collana Springer INdAM series; Volume 43 Disciplina 515 Soggetti Calculus Functional analysis **Functions** Harmonic analysis Mathematical analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Ascanelli, A. and Cappiello, M., Semilinear p-evolution equations in weighted Sobolev spaces -- Ascanelli, A. et al., Random-eld Solutions of Linear Parabolic Stochastic Partial Dierential Equations with Polynomially Bounded Variable Coefficients -- Brauer, U. and Karp, I., The non-isentropic Einstein-Euler system written in a symmetric hyperbolicfor -- Chen, W. and Palmieri, A., Blow-up result for a semilinear wave equation with a non linear memory term -- Ciani, S. and Vespri, V., An Introduction to Barenblatt Solutions for Anisotropic p-Laplace Equation -- Colombini, F. et al., No loss of derivatives for

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Sommario/riassunto

The contributions contained in the volume, written by leading experts in their respective fields, are expanded versions of talks given at the INDAM Workshop "Anomalies in Partial Differential Equations" held in September 2019 at the Istituto Nazionale di Alta Matematica, Dipartimento di Matematica "Guido Castelnuovo", Università di Roma "La Sapienza". The volume contains results for well-posedness and local solvability for linear models with low regular coefficients. Moreover, nonlinear dispersive models (damped waves, p-evolution models) are discussed from the point of view of critical exponents, blow-up phenomena or decay estimates for Sobolev solutions. Some contributions are devoted to models from applications as traffic flows, Einstein-Euler systems or stochastic PDEs as well. Finally, several contributions from Harmonic and Time-Frequency Analysis, in which the authors are interested in the action of localizing operators or the description of wave front sets, complete the volume.