1. Record Nr. UNINA9910254082803321 Harmonic analysis, partial differential equations, complex analysis, **Titolo** Banach spaces, and operator theory (volume 1): celebrating Cora Sadosky's life / / edited by María Cristina Pereyra, Stefania Marcantognini, Alexander M. Stokolos, Wilfredo Urbina Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-30961-7 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XVI, 371 p. 43 illus., 17 illus. in color.) Collana Association for Women in Mathematics Series, , 2364-5733 ; ; 4 Disciplina 510 Soggetti Harmonic analysis Operator theory Mathematical physics Abstract Harmonic Analysis **Operator Theory** Mathematical Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Preface -- Part I: Cora -- Cora Sadosky: her mathematics, mentorship, and professional contributions (Rodolfo Torres) -- Cora's scholarly work: publications according to MathSciNet -- Remembrances and Photos (Steven Krantz, María Dolores (Loló) Morán, Guido Weiss, Mike Wilson, Georgia Benkhart, Judy Green, Richard Bourgin, Daniel Szyld, Estela Gavosto, Andrea Nahmod, María Cristina Pereyra, Gustavo Ponce, Rodolfo Torres & Wilfredo Urbina) -- Part II: Harmonic and Complex Analysis, Banach and Metric Spaces, and Partial Differential Equations -- Higher-order elliptic equations in non-smooth domains: history and recent results (Svitlana Mayboroda) -- Victor Shapiro and the theory of uniqueness for multiple trigonometric series (Marshall Ash) -- A last conversation with Cora (Aline Bonami) -- Fourier multipliers of the homogeneous Sobolev space W1,1 (Aline Bonami) -- A Note on

nonhomogeneous weighted div-curl lemmas (Der-Chen Chang, Galia Dafni & Hong Yue) -- A remark on bilinear square functions (Lukas

Grafakos) -- Unique continuous for the elasticity system and a counterexample for second order elliptic systems (Carlos Kenig & Jenn-Nan Wang) -- Hardy spaces of holomorphic functions for domains in Cn with minimal smoothness (Loredana Lanzani & Eli Stein) -- On the preservation of eccentricities of Monge-Ampère sections (Diego Maldonado) -- BMO: oscillations, self-improvement, Gagliardo coordinate spaces and reverse Hardy inequalities (Mario Milman) -- Besov spaces, symbolic calculus and boundedness of bilinear pseudodifferential operators (Virginia Naibo & Jodi Herbert) -- Metric characterization of some classes of Banach spaces (Mikhail Ostrowski) -- On the IVP for the k-generalized Benjamin-Ono equation (Gustavo Ponce).

Sommario/riassunto

Covering a range of subjects from operator theory and classical harmonic analysis to Banach space theory, this book contains survey and expository articles by leading experts in their corresponding fields, and features fully-refereed, high-quality papers exploring new results and trends in spectral theory, mathematical physics, geometric function theory, and partial differential equations. Graduate students and researchers in analysis will find inspiration in the articles collected in this volume, which emphasize the remarkable connections between harmonic analysis and operator theory. Another shared research interest of the contributors of this volume lies in the area of applied harmonic analysis, where a new notion called chromatic derivatives has recently been introduced in communication engineering. The material for this volume is based on the 13th New Mexico Analysis Seminar held at the University of New Mexico, April 3-4, 2014 and on several special sections of the Western Spring Sectional Meeting at the University of New Mexico, April 4-6, 2014. During the event, participants honored the memory of Cora Sadosky—a great mathematician who recently passed away and who made significant contributions to the field of harmonic analysis. Cora was an exceptional mathematician and human being. She was a world expert in harmonic analysis and operator theory, publishing over fifty-five research papers and authoring a major textbook in the field. Participants of the conference include new and senior researchers, recent doctorates as well as leading experts in the area.