Record Nr. UNINA9910279756703321 Progress in Industrial Mathematics at ECMI 2016 / / edited by Peregrina **Titolo** Quintela, Patricia Barral, Dolores Gómez, Francisco J. Pena, Jerónimo Rodríguez, Pilar Salgado, Miguel E. Vázquez-Méndez Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-63082-2 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (749 pages) The European Consortium for Mathematics in Industry;; 26 Collana 620.00151 Disciplina Soggetti Mathematical analysis Analysis (Mathematics) Applied mathematics **Engineering mathematics** Numerical analysis Mathematical optimization **Probabilities Statistics Analysis** Applications of Mathematics **Numerical Analysis** Optimization Probability Theory and Stochastic Processes Statistics for Life Sciences, Medicine, Health Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Preface -- Part I: Plenary Lectures -- Part II. Hansjörg Wacker Memorial Nota di contenuto Prize -- Part III: Minisymposia -- Part IV: Contributed Talks. Sommario/riassunto This book addresses mathematics in a wide variety of applications, ranging from problems in electronics, energy and the environment, to mechanics and mechatronics. Using the classification system defined in the EU Framework Programme for Research and Innovation H2020,

several of the topics covered belong to the challenge climate action,

environment, resource efficiency and raw materials; and some to health, demographic change and wellbeing; while others belong to Europe in a changing world - inclusive, innovative and reflective societies. The 19th European Conference on Mathematics for Industry, ECMI2016, was held in Santiago de Compostela, Spain in June 2016. The proceedings of this conference include the plenary lectures, ECMI awards and special lectures, mini-symposia (including the description of each mini-symposium) and contributed talks. The ECMI conferences are organized by the European Consortium for Mathematics in Industry with the aim of promoting interaction between academy and industry, leading to innovation in both fields and providing unique opportunities to discuss the latest ideas, problems and methodologies, and contributing to the advancement of science and technology. They also encourage industrial sectors to propose challenging problems where mathematicians can provide insights and fresh perspectives. Lastly, the ECMI conferences are one of the main forums in which significant advances in industrial mathematics are presented, bringing together prominent figures from business, science and academia to promote the use of innovative mathematics in industry.