Record Nr. UNINA9910163046103321 Mathematics across contemporary sciences: AUS-ICMS, Sharjah, UAE, **Titolo** April 2015 / / edited by Taher Abualrub, Abdul Salam Jarrah, Sadok Kallel, Hana Sulieman Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-46310-1 Edizione [1st ed. 2017.] 1 online resource (X, 259 p. 22 illus., 5 illus. in color.) Descrizione fisica Springer Proceedings in Mathematics & Statistics, , 2194-1009;; 190 Collana 519 Disciplina Soggetti Mathematical physics Matrix theory Algebra Mathematical analysis Analysis (Mathematics) Mathematical Applications in the Physical Sciences Linear and Multilinear Algebras, Matrix Theory **Analysis** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto 1 Samirah Alsulami, Hellen Colman and Frank Neumann: The Lusternik-Schnirelmann Category for a Differentiable Stack -- 2 Richard A. Brualdi and Shi-Mei Ma: Centrosymmetric, Symmetric and Hankel-Symmetric Matrices -- 3 Costanza Catalano and Alberto Gandolfi: Partially Independent Random Variables -- 4 Dmitry Efimov and Hana Sulieman: Sobol Sensitivity for Machine Learning -- 5 Jon Pierre Fortney: Basis Independence of Implicitly Defined Hamiltonian Circuit Dynamics -- 6 Hichem Hajaeij: On a New Class of Variational Problems -- 7 A. Samad Hedayat: A Scientific Tour on Orthogonal Arrays -- 8 Hadi Kharaghani and Sho Suda: Hoffman's Coclique Bound for Normal Regular Diagraphs and Nonsymmetric Association Schemes -- 9 Salim A. Messaoudi and Soh Edwin Mukiawa: A Suspension Bridge Problem: Existence and Stability -- 10 Greg Orosi: An Interpolation-Based Approach to

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Sommario/riassunto

This work presents invited contributions from the second "International Conference on Mathematics and Statistics" jointly organized by the AUS (American University of Sharjah) and the AMS (American Mathematical Society). Addressing several research fields across the mathematical sciences, all of the papers were prepared by faculty members at universities in the Gulf region or prominent international researchers. The current volume is the first of its kind in the UAE and is intended to set new standards of excellence for collaboration and scholarship in the region.