Record Nr. UNINA9910300126003321 2016 MATRIX Annals / / edited by Jan de Gier, Cheryl E. Praeger, Titolo Terence Tao Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-72299-9 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (667 pages) Collana MATRIX Book Series, , 2523-3041; ; 1 Disciplina 510.71 Soggetti Category theory (Mathematics) Homological algebra Group theory Mathematical optimization K-theory **Topology** Category Theory, Homological Algebra **Group Theory and Generalizations** Optimization K-Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Part I Refereed Articles: 1 Higher Structures in Geometry and Physics --Nota di contenuto 2 Winter of Disconnectedness -- 3 Approximation and Optimisation --4 Refining C* Algebraic Invariants for Dynamics using KK-Theory -- 5 Interactions between Topological Recursion, Modularity, Quantum Invariants and Low-dimensional Topology -- Part II Other Contributed Articles: 6 Higher Structures in Geometry and Physics -- 7 Winter of Disconnectedness -- 8 Interactions between Topological Recursion, Modularity, Quantum Invariants and Low-dimensional Topology. MATRIX is Australia's international, residential mathematical research Sommario/riassunto institute. It facilitates new collaborations and mathematical advances through intensive residential research programs, each lasting 1-4

weeks. This book is a scientific record of the five programs held at MATRIX in its first year, 2016: - Higher Structures in Geometry and

Physics - Winter of Disconnectedness - Approximation and Optimisation - Refining C*-Algebraic Invariants for Dynamics using KK-theory - Interactions between Topological Recursion, Modularity, Quantum Invariants and Low- dimensional Topology The MATRIX Scientific Committee selected these programs based on their scientific excellence and the participation rate of high-profile international participants. Each program included ample unstructured time to encourage collaborative research; some of the longer programs also included an embedded conference or lecture series. The articles are grouped into peer-reviewed contributions and other contributions. The peer-reviewed articles present original results or reviews on selected topics related to the MATRIX program; the remaining contributions are predominantly lecture notes based on talks or activities at MATRIX.