Record Nr. UNINA9910349318403321 Birational Geometry of Hypersurfaces: Gargnano del Garda, Italy, 2018 **Titolo** // edited by Andreas Hochenegger, Manfred Lehn, Paolo Stellari Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-18638-5 Edizione [1st ed. 2019.] 1 online resource (IX, 297 p. 36 illus.) Descrizione fisica Lecture Notes of the Unione Matematica Italiana, , 1862-9113 ; ; 26 Collana 516.35 Disciplina 516.5 Soggetti Algebraic geometry Category theory (Mathematics) Homological algebra Algebraic Geometry Category Theory, Homological Algebra Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Originating from the School on Birational Geometry of Hypersurfaces, this volume focuses on the notion of (stable) rationality of projective varieties and, more specifically, hypersurfaces in projective spaces, and provides a large number of open questions, techniques and spectacular results. The aim of the school was to shed light on this vast area of research by concentrating on two main aspects: (1) Approaches focusing on (stable) rationality using deformation theory and Chowtheoretic tools like decomposition of the diagonal; (2) The connection between K3 surfaces, hyperkähler geometry and cubic fourfolds, which has both a Hodge-theoretic and a homological side. Featuring the beautiful lectures given at the school by Jean-Louis Colliot-Thélène, Daniel Huybrechts, Emanuele Macrì, and Claire Voisin, the volume also includes additional notes by János Kollár and an appendix by Andreas

Hochenegger. .