Record Nr. UNINA9910157860503321 Rationality problems in algebraic geometry: Levico Terme, Italy 2015 / **Titolo** / Arnaud Beauville, Brendan Hassett, Alexander Kuznetsov, Alessandro Verra: Rita Pardini, Gian Pietro Pirola, editors Cham, Switzerland, : Springer, 2016 Pubbl/distr/stampa **ISBN** 3-319-46209-1 Descrizione fisica 1 online resource Lecture notes in mathematics. . 0075-8434 : : 2172 Collana Disciplina 516.3/5 Soggetti Geometry, Algebraic Geometrie algebrique Algebraic geometry Mathematics - Geometry - Algebraic Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction.-Arnaud Beauville: The Luroth problem.-Brendan Hassett: Cubic Fourfolds, K3 Surfaces, and Rationality Questions -- Alexander Kuznetsov: Derived categories view on rationality problems --Alessandro Verra: Classical moduli spaces and Rationality -- Howard Nuer: Unirationality of Moduli Spaces of Special Cubic Fourfolds and K3 Surfaces. Providing an overview of the state of the art on rationality questions in Sommario/riassunto algebraic geometry, this volume gives an update on the most recent developments. It offers a comprehensive introduction to this fascinating topic, and will certainly become an essential reference for anybody working in the field. Rationality problems are of fundamental importance both in algebra and algebraic geometry. Historically, rationality problems motivated significant developments in the theory of abelian integrals. Riemann surfaces and the Abel-Jacobi map, among other areas, and they have strong links with modern notions such as moduli spaces, Hodge theory, algebraic cycles and derived categories. This text is aimed at researchers and graduate students in algebraic

geometry.