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| Titolo                  | Rationality of Varieties / / edited by Gavril Farkas, Gerard van der Geer, Mingmin Shen, Lenny Taelman  |
| Pubbl/distr/stampa      | Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2021   |
| ISBN                    | 3-030-75421-9   |
| Edizione                | [1st ed. 2021.]   |
| Descrizione fisica      | 1 online resource (440 pages)   |
| Collana                 | Progress in Mathematics, , 2296-505X ; ; 342  |
| Disciplina              | 516.35  |
| Soggetti                | Algebraic geometry<br>Algebraic Geometry  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di bibliografia    | Includes bibliographical references.  |
| Nota di contenuto       | Rationality of Fano threefolds of degree 18 over nonclosed fields -- A categorical invariant for geometrically rational surfaces with a conic bundle structure -- Vanishing cycles under base change and the integral Hodge conjecture -- Explicit rationality of some Fano fourfolds -- Unirationality of certain universal families of cubic fourfolds -- Rational curves and MBM classes on hyperkähler manifolds: a survey -- Marked and labelled Gushel-Mukai fourfolds -- The Igusa quartic and the Prym map. (I) Some Rationality results -- Rationality of Mukai varieties over non-closed fields -- A refinement of the motivic volume, and specialization of birational types -- On the image of the second ell-adic Bloch map -- Supersingular irreducible symplectic varieties -- On the geometry of Fano threefold hypersurfaces -- Symbols and equivariant birational geometry in small dimensions. |
| Sommario/riassunto      | This book provides an overview of the latest progress on rationality questions in algebraic geometry. It discusses new developments such as universal triviality of the Chow group of zero cycles, various aspects of stable birationality, cubic and Fano fourfolds, rationality of moduli spaces and birational invariants of group actions on varieties, contributed by the foremost experts in their fields. The question of whether an algebraic variety can be parametrized by rational functions of as many variables as its dimension has a long history and played an important role in the history of algebraic geometry. Recent  |

developments in algebraic geometry have made this question again a focal point of research and formed the impetus to organize a conference in the series of conferences on the island of Schiermonnikoog. The book follows in the tradition of earlier volumes, which originated from conferences on the islands Texel and Schiermonnikoog.

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