Record Nr. UNINA9910338249803321 Moduli of K-stable Varieties / / edited by Giulio Codogni, Ruadhaí Titolo Dervan, Filippo Viviani Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XIII, 181 p. 18 illus.) Springer INdAM Series, , 2281-518X;; 31 Collana Disciplina 516.35 Soggetti Algebraic geometry Geometry Functions of complex variables Algebraic Geometry Several Complex Variables and Analytic Spaces Lingua di pubblicazione Inalese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "This volume contains a collection of papers related to research presented at the INdAM Workshop "Moduli of K-stable vaieties", which was held in Rome, from 10 to 14 July 2017, at Sapienza Universita di Roma." Nota di contenuto 1 F. Ambro and J. Kollár, Minimal Models of semi-log-canonical pairs -- 2 G. Codogni and J. Stoppa, Torus Equivariant K-stability -- 3 K. Fujita, Notes on K-semistability of topic polarized surfaces -- 4 E. Legendre. A note on extremal toric almost Kähler metrics -- 5 Y. Odaka, Tropical geometric compactification of moduli, I - M g case --6 Z. Sjöström Dyrefelt, A partial comparison of stability notions in Kähler geometry -- 7 C. Spotti, Kähler-Einstein metrics via moduli continuity -- 8 X. Wang, GIT stability, K-stability and moduli space of Fano varieties. This volume is an outcome of the workshop "Moduli of K-stable Sommario/riassunto Varieties", which was held in Rome, Italy in 2017. The content focuses on the existence problem for canonical Kähler metrics and links to the algebro-geometric notion of K-stability. The book includes both surveys on this problem, notably in the case of Fano varieties, and original contributions addressing this and related problems. The papers in the latter group develop the theory of K-stability; explore canonical

metrics in the Kähler and almost-Kähler settings; offer new insights into the geometric significance of K-stability; and develop tropical aspects of the moduli space of curves, the singularity theory necessary for higher dimensional moduli theory, and the existence of minimal models. Reflecting the advances made in the area in recent years, the survey articles provide an essential overview of many of the most important findings. The book is intended for all advanced graduate students and researchers who want to learn about recent developments in the theory of moduli space, K-stability and Kähler-Einstein metrics.