Record Nr. UNINA9910778222903321 Autore Kollar Janos Titolo Lectures on resolution of singularities [[electronic resource] /] / Janos Kollar Pubbl/distr/stampa Princeton, N.J., : Princeton University Press, 2007 **ISBN** 1-282-15774-4 9786612157745 1-4008-2780-9 Edizione [Course Book] Descrizione fisica 1 online resource (215 p.) Collana Annals of mathematics studies; ; 166 Classificazione SK 240 Disciplina 516.3/5 Soggetti Singularities (Mathematics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 197-202) and index. Nota di contenuto Frontmatter -- Contents -- Introduction -- Chapter 1. Resolution for Curves -- Chapter 2. Resolution for Surfaces -- Chapter 3. Strong Resolution in Characteristic Zero -- Bibliography -- Index Sommario/riassunto Resolution of singularities is a powerful and frequently used tool in algebraic geometry. In this book, János Kollár provides a comprehensive treatment of the characteristic 0 case. He describes more than a dozen proofs for curves, many based on the original papers of Newton, Riemann, and Noether. Kollár goes back to the original sources and presents them in a modern context. He addresses three methods for surfaces, and gives a self-contained and entirely elementary proof of a strong and functorial resolution in all dimensions. Based on a series of lectures at Princeton University and written in an informal yet lucid style, this book is aimed at readers who

are interested in both the historical roots of the modern methods and

in a simple and transparent proof of this important theorem.