1. Record Nr. UNINA9910154742903321 Autore Eisenbud David Titolo Three-Dimensional Link Theory and Invariants of Plane Curve Singularities. (AM-110), Volume 110 / / David Eisenbud, Walter D. Neumann Pubbl/distr/stampa Princeton, NJ:,: Princeton University Press,, [2016] ©1986 ISBN 1-4008-8192-7 Descrizione fisica 1 online resource (184 pages): illustration Collana Annals of Mathematics Studies; 293 Disciplina 514.2 Soggetti Link theory Invariants Curves, Plane Singularities (Mathematics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references. Nota di contenuto Frontmatter -- Contents -- Abstract -- Three-Dimensional Link Theory and Invariants of Plane Curve Singularities -- Introduction -- Review --Preview -- Chapter I: Foundations -- Appendix to Chapter I: Algebraic Links -- Chapter II: Classification -- Chapter III: Invariants -- Chapter IV: Examples -- Chapter V: Relation to Plumbing -- References --Backmatter Sommario/riassunto This book gives a new foundation for the theory of links in 3-space modeled on the modern developmentby Jaco, Shalen, Johannson, Thurston et al. of the theory of 3-manifolds. The basic construction is a method of obtaining any link by "splicing" links of the simplest kinds, namely those whose exteriors are Seifert fibered or hyperbolic. This approach to link theory is particularly attractive since most invariants of links are additive under splicing. Specially distinguished from this viewpoint is the class of links, none of whose splice components is hyperbolic. It includes all links constructed by cabling and connected sums, in particular all links of singularities of complex plane curves.

One of the main contributions of this monograph is the calculation of invariants of these classes of links, such as the Alexander polynomials,