1. Record Nr. UNINA9910154752003321 Autore Neuwirth Lee Paul **Titolo** Knots, Groups and 3-Manifolds (AM-84), Volume 84: Papers Dedicated to the Memory of R.H. Fox. (AM-84) / / Lee Paul Neuwirth Pubbl/distr/stampa Princeton, NJ: .: Princeton University Press, . [2016] ©1975 **ISBN** 1-4008-8151-X Descrizione fisica 1 online resource (352 pages): illustrations Collana Annals of Mathematics Studies:: 233 Disciplina 514.2 Soggetti Knot theory Group theory Three-manifolds (Topology) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographies. Nota di contenuto Frontmatter -- CONTENTS -- INTRODUCTION / Neuwirth, L. --BIBLIOGRAPHY, RALPH HARTZLER FOX (1913-1973) -- Knots and Links -- SYMMETRIC FIBERED LINKS / Goldsmith, Deborah L. -- KNOT MODULES / Levine, Jerome -- THE THIRD HOMOTOPY GROUP OF SOME HIGHER DIMENSIONAL KNOTS / Lomonaco, S. J. -- OCTAHEDRAL KNOT COVERS / Perko, Kenneth A. -- SOME KNOTS SPANNED BY MORE THAN ONE UNKNOTTED SURFACE OF MINIMAL GENUS / Trotter, H. F. --GROUPS AND MANIFOLDS CHARACTERIZING LINKS / Whitten, Wilbur --Group Theory -- HNN GROUPS AND GROUPS WITH CENTER / Cossey, John / Smythe, N. -- QUOTIENTS OF THE POWERS OF THE AUGMENTATION IDEAL IN A GROUP RING / Stallings, John R. -- KNOT-LIKE GROUPS / Strasser, Elvira Rapaport -- 3-Dimensional Manifolds --ON THE EQUIVALENCE OF HEEGAARD SPLITTINGS OF CLOSED, ORIENT ABLE 3-MANIFOLDS / Birman, Joan S. -- BRANCHED CYCLIC COVERINGS / Cappell, Sylvain E. / Shaneson, Julius L. -- ON THE 3-DIMENSIONAL BRIESKORN MANIFOLDS M(p,q,r) / Milnor, John -- SURGERY ON LINKS AND DOUBLE BRANCHED COVERS OF S3 / Montesinos, Jose M. --PLANAR REGULAR COVERINGS OF ORIENTABLE CLOSED SURFACES /

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Sommario/riassunto

There is a sympathy of ideas among the fields of knot theory, infinite discrete group theory, and the topology of 3-manifolds. This book contains fifteen papers in which new results are proved in all three of these fields. These papers are dedicated to the memory of Ralph H. Fox, one of the world's leading topologists, by colleagues, former students, and friends. In knot theory, papers have been contributed by Goldsmith, Levine, Lomonaco, Perko, Trotter, and Whitten. Of these several are devoted to the study of branched covering spaces over knots and links, while others utilize the braid groups of Artin. Cossey and Smythe, Stallings, and Strasser address themselves to group theory. In his contribution Stallings describes the calculation of the groups In/In+1 where I is the augmentation ideal in a group ring RG. As a consequence, one has for each k an example of a k-generator lrelator group with no free homomorphs. In the third part, papers by Birman, Cappell, Milnor, Montesinos, Papakyriakopoulos, and Shalen comprise the treatment of 3-manifolds. Milnor gives, besides important new results, an exposition of certain aspects of our current knowledge regarding the 3- dimensional Brieskorn manifolds.