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前言

In presenting this treatment of homological algebra, it is a pleasureto acknowledge the help and encouragement which I have had fromall sides. Homological algebra arose from many sources in algebra andtopology. Decisive examples came from the study of group extensions and their factor sets, a subject I learned in joint work with OTTO SCHIL-LING. A further development of homological ideas, with a view to theirtopological applications, came in my long collaboration with SAHUELEZLENBERG; to both collaborators, especial thanks. For many yearsthe Air Force Office of Scientific Research supported my researchprojects on various subjects now summarized here; it is a pleasure toacknowledge their lively understanding Of basic science.

Both REINHOLD BAER and JOSEF SCHMID read and commented onmy entire manuscript; their advice has led to many improvements. ANDERS KOCK and JACOUES RIGUET have read the entire galley proofand caught many slips and obscurities. Among the others whose sug-gestions have served me well, I note FRANK ADAMS, LOUIS AUSLANDER, WILFRED COCKCROFT, ALBRECHT DOLD, GEOFFREY HORROCKS, FRIED-RICH KASCH, JOHANN LEICHT, ARUNAS LIULEVIC1US, JOHN MOORE, DIE-TBR PUFFE, JOSEPH YAO, and a number of my current students at theUniversity of Chicago — not to mention the auditors of my lecturesat Chicago, Heidelberg, Bonn, Frankfurt, and Aarhus. My wife, DonoTHY, has cheerfully typed more versions of more chapters than she wouldlike to count. Messrs. SPRINTER have been unfailingly courteous in thepreparation of the book; in particular, I am grateful to F. K. SCHMIDT, the Editor of this series, for his support. To all these and others whohave helped me, I express my best thanks.



内容概要

In presenting this treatment of homological algebra, it is a pleasureto acknowledge the help and encouragement which I have had fromall sides. Homological algebra arose from many sources in algebra andtopology. Decisive examples came from the study of group extensions and their factor sets, a subject I learned in joint work with OTTO SCHIL-LING. A further development of homological ideas, with a view to theirtopological applications, came in my long collaboration with SAHUELEZLENBERG; to both collaborators, especial thanks. For many yearsthe Air Force Office of Scientific Research supported my researchprojects on various subjects now summarized here; it is a pleasure toacknowledge their lively understanding Of basic science.





作者简介

Saunders Mac Lane was born on August 4, 1909in Connecticut. He studied at Yale University and then at the University of Chicago and atG6ttingen, where he received the D. Phil. in 1934. He has taught at Harvard, Cornel1 and theUniversity of Chicago. Mac Lanes initial research was in logic andin algebraic number theory (valuation theory). With Samuel Eilenberg he published fifteenpapers on algebraic topology. A number of theminvolved the initial steps in the cohomology of groups and in other aspects of homological algebra - as well as the discovery of categorytheory. His famous undergraduate textbookSurvey of modern algebra, written jointly withG. Birkhoff, has remained in print for over50 years. Mac Lane is also the author of severalother highly successful books.



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