

<<同调>>

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前言

In presenting this treatment of homological algebra, it is a pleasure to acknowledge the help and encouragement which I have had from all sides. Homological algebra arose from many sources in algebra and topology. 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 their topological applications, came in my long collaboration with SAHUELEZLENBERG; to both collaborators, especial thanks. For many years the Air Force Office of Scientific Research supported my research projects on various subjects now summarized here; it is a pleasure to acknowledge their lively understanding of basic science.

Both REINHOLD BAER and JOSEF SCHMID read and commented on my entire manuscript; their advice has led to many improvements. ANDERS KOCK and JACQUES RIGUET have read the entire galley proof and caught many slips and obscurities. Among the others whose suggestions have served me well, I note FRANK ADAMS, LOUIS AUSLANDER, WILFRED COCKCROFT, ALBRECHT DOLD, GEOFFREY HORROCKS, FRIED-RICH KASCH, JOHANN LEICHT, ARUNAS LIULEVICIUS, JOHN MOORE, DIETRICH PUFFE, JOSEPH YAO, and a number of my current students at the University of Chicago — not to mention the auditors of my lectures at Chicago, Heidelberg, Bonn, Frankfurt, and Aarhus. My wife, DONOTHY, has cheerfully typed more versions of more chapters than she would like to count. Messrs. SPRINTER have been unfailingly courteous in the preparation 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 who have helped me, I express my best thanks.

内容概要

In presenting this treatment of homological algebra , it is a pleasure to acknowledge the help and encouragement which I have had from all sides. Homological algebra arose from many sources in algebra and topology. 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 their topological applications , came in my long collaboration with SAHUELEZLENBERG; to both collaborators , especial thanks. For many years the Air Force Office of Scientific Research supported my research projects on various subjects now summarized here; it is a pleasure to acknowledge their lively understanding Of basic science.

作者简介

Saunders Mac Lane was born on August 4, 1909 in Connecticut. He studied at Yale University and then at the University of Chicago and at Göttingen, where he received the D. Phil. in 1934. He has taught at Harvard, Cornell and the University of Chicago. Mac Lane's initial research was in logic and in algebraic number theory (valuation theory). With Samuel Eilenberg he published fifteen papers on algebraic topology. A number of them involved the initial steps in the cohomology of groups and in other aspects of homological algebra - as well as the discovery of category theory. His famous undergraduate textbook *Survey of modern algebra*, written jointly with G. Birkhoff, has remained in print for over 50 years. Mac Lane is also the author of several other highly successful books.

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