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Sommario/riassunto

This book is primarily concerned with the study of cohomology theories of general topological spaces with "general coefficient systems." Sheaves play several roles in this study. For example, they provide a suitable notion of "general coefficient systems." Moreover, they furnish us with a common method of defining various cohomology theories and of comparison between different cohomology theories. The parts of the theory of sheaves covered here are those areas impor-tant to algebraic topology. Sheaf theory is also important in other fields of mathematics, notably algebraic geometry, but that is outside the scope of the present book. Thus a more descriptive title for this book might have been Algebraic Topology from the Point of View of Sheaf Theory. Several innovations will be found in this book. Notably, the con-cept of the "tautness" of a subspace (an adaptation of an analogous no-tion of Spanier to sheaf-theoretic cohomology) is introduced and exploited throughout the book. The factthat sheaf-theoretic cohomology satisfies 1 the homotopy property is proved for general topological spaces. Also, relative cohomology is introduced into sheaf theory. Concerning relative cohomology, it should be noted that sheaf-theoretic cohomology is usually considered as a "single space" theory.