

Preface

These are the unaltered notes of a graduate course in homotopy theory which was given at M.I.T. in the fall of 1953. They were compiled by Mr. Robert J. Aumann, Teaching Assistant in the Department of Mathematics. A previous edition of the notes, was distributed for a number of years by the Department of Mathematics at M.I.T. About five years ago, in anticipation of a number of books on homotopy theory which were about to appear, it was decided that the notes had served their purpose and their distribution was discontinued. Since some of the envisioned works never materialized, and since there is evidence of a continuing demand for these notes, they are being reissued in the present form, the pressure of other duties having left me with insufficient time to carry out a wholesale revision.

The notes were designed for a second-year graduate course. A knowledge of two fundamental groups, and of algebraic topology as far as singular theory, is assumed. They were not intended to be complete, but were designed to introduce the student to some of the more important concepts of homotopy theory, and at the same time to lead him to the frontier of research. In the intervening years the subject has grown with great rapidity, and they no longer fulfill the second objective. I believe that they still fulfill the first, although by now the subject matter might be more appropriate for the second term of a first-year course.

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