

# CONTEMPORARY MATHEMATICS

PROCEEDINGS OF THE

## Northwestern Homotopy Theory Conference

AMERICAN MATHEMATICAL SOCIETY

**VOLUME 19**

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# **CONTEMPORARY MATHEMATICS**

**Volume 19**

**PROCEEDINGS OF THE**

## **Northwestern Homotopy Theory Conference**

**Haynes R. Miller and  
Stewart B. Priddy, Editors**

**AMERICAN MATHEMATICAL SOCIETY**

**Providence • Rhode Island**

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## Introduction

As part of its emphasis year in topology, Northwestern University sponsored a conference on homotopy theory during the week of March 22-26, 1982. Generous support was provided by the National Science Foundation and the host university. In addition, efforts to bring in several foreign mathematicians were aided by the cooperation and support of the University of Chicago.

The scientific program included 9 plenary lectures, listed below, and numerous seminar talks in parallel sessions. This volume collects papers by participants, corresponding for the most part to lectures given at the conference. All were refereed. It ends with a list of problems presented at a session organized by Bruce Williams.

The editors of this volume would like to express their thanks to the many topologists who served as conscientious referees, to the editors of the Contemporary Mathematics series, and to Karen Walcott, who showed great energy and initiative as secretary both during the conference and afterwards in assembling this book.



## Plenary Lectures

John Jones, "The Kervaire Invariant"

Bob MacPherson, "Intersection Homology"

Wu-chung Hsiang, "Some Application of  $K_{-j}$ "

Gunnar Carlsson, "Some Remarks on Segal's Burnside Ring Conjecture"

John Morgan "Valuations and the Boundary of Teichmüller Spaces"

Ralph Cohen, "On the Immersion Conjecture"

Ib Madsen, "Odd Order Periodic Homeomorphisms of Spheres"

Bill Dwyer, "Homotopy Methods in Algebraic K-Theory"

Pete Bousfield, "On Stable Homotopy Theory from a Global Viewpoint"

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