

PREFACE

A conference on Quadratic forms and Related Topics was held at Louisiana State University, Baton Rouge, Louisiana, USA, from March 26 to March 30, 2001. This meeting was jointly supported by the National Science Foundation, the Louisiana Education Quality Support Fund, the LSU Office of Research and Graduate Studies, the LSU College of Arts and Sciences, and the LSU Department of Mathematics. The conference was organized by J. William Hoffman, Jurgen Hurrelbrink, Jorge Morales, Robert Perlis, and Paul van Wamelen, all at LSU.

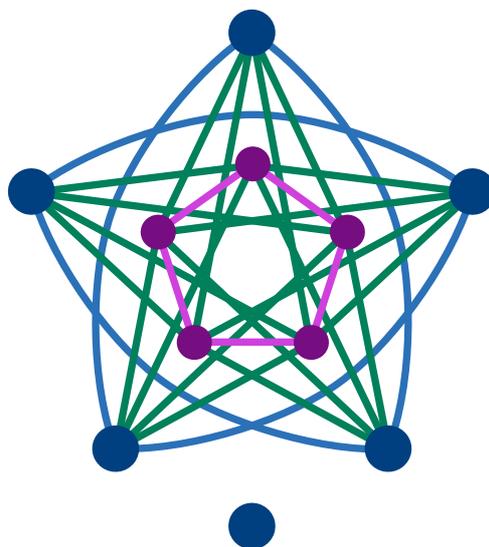
This book is the volume of the proceedings for that meeting. The majority of the articles published here record details of talks delivered at the conference. All contributions have been refereed independently according to DOCUMENTA MATHEMATICA standards.

The papers in this volume are representative of the current state of the subject. In the recent past, the field of Quadratic Forms has enjoyed breakthrough results such as the confirmation of the Milnor Conjecture on relations between the theory of quadratic forms and algebraic K -theory. Topics of the articles in the proceedings include Witt groups, Brauer groups, Galois cohomology, generic splitting of quadratic forms, Hasse principles, and the theory of involutions.

It is a pleasure for us to give thanks to the agencies involved for their support of this conference. We would also like to take the opportunity to thank our colleagues, graduate students and staff at LSU for their untiring and alert assistance before and during the meeting, and all speakers and participants for their contributions to the success of the conference.

The Organizers
Baton Rouge, October 2001

THE LOGO



It is a classical problem to determine the structure of the ideal class group of a number field. Several students of the Algebraic Number Theory/Quadratic Forms group at LSU have been working on this problem.

The students associated graphs to quadratic fields so that the properties of the graphs yielded results about the ideal class groups. One of the graphs they came across is this beautiful graph. Except for the isolated vertex, the graph is the edge complement of the Petersen graph, one of the most fundamental and well-known of all graphs.

The LSU Department of Mathematics has adopted this graph as the logo for its website to symbolize the many years of achievement by its graduate students.

EDITORS

The proceedings are edited by the conference organizers J. W. Hoffman, J. Hurrelbrink, J. Morales, R. Perlis, P. van Wamelen in cooperation with the editors of DOCUMENTA MATHEMATICA.