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978-0-521-20742-3 - Graph Theory Coding Theory and Block Designs
P.J. Cameron and J.H. Van Lint
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Introduction

In the year 1973, Professor van Lint and Dr. Cameron visited Westfield College separately on various occasions to lecture at our Seminar on Combinatorial Algebra and Geometry. As the subject matter of their lectures overlapped in a most interesting way, the idea was conceived of organizing the notes already prepared by each of them into a coherent whole. The present volume is the outcome.

The object of the lectures, and of these lecture notes, was to present to an audience already familiar with the theory of designs some of the connections and applications with other branches of mathematics. (For the present book, however, a short introductory chapter on designs has been included.) In particular, this has meant largely graphs and codes, and to both of these subjects as well some kind of introduction is given. But the object has been to stress the connections of design theory with these other areas, and so no attempt at a consistent coverage of graph theory and coding theory has been made.

The perceptive reader may well detect a difference in style between various chapters, revealing the particular approaches of the two authors. But we believe that the overall mathematical unity of the lectures and of the notes will be evident, and very useful to students and research workers in these fields.

D. R. Hughes

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