Record Nr. UNINA9910826816903321 Autore Bailey R (Rosemary) Titolo Association schemes: designed experiments, algebra, and combinatorics / / R.A. Bailey Cambridge; New York, : Cambridge University Press, 2004 Pubbl/distr/stampa **ISBN** 1-107-14641-0 1-280-45792-9 9786610457922 0-511-18557-X 0-511-18474-3 0-511-18738-6 0-511-31353-5 0-511-61088-2 0-511-18645-2 Edizione [1st ed.] Descrizione fisica 1 online resource (xviii, 387 pages) : digital, PDF file(s) Cambridge studies in advanced mathematics;; 84 Collana Disciplina 511/.6 Soggetti Association schemes (Combinatorial analysis) Experimental design Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references (p. 367-380) and index. Nota di contenuto Cover; Half-title; Series-title; Title; Copyright; Contents; Preface; Acknowledgements: 1 Association schemes: 2 The Bose-Mesner algebra; 3 Combining association schemes; 4 Incomplete-block designs; 5 Partial balance; 6 Families of partitions; 7 Designs for structured sets; 8 Groups; 9 Posets; 10 Subschemes, quotients, duals and products; 11 Association schemes on the same set; 12 Where next?; 13 History and references; Glossary of notation; References; Index Sommario/riassunto Association schemes are of interest to both mathematicians and

statisticians and this book was written with both audiences in mind. For statisticians, it shows how to construct designs for experiments in blocks, how to compare such designs, and how to analyse data from them. The reader is only assumed to know very basic abstract algebra.

For pure mathematicians, it tells why association schemes are important and develops the theory to the level of advanced research. This book arose from a course successfully taught by the author and as such the material is thoroughly class-tested. There are a great number of examples and exercises that will increase the book's appeal to both graduate students and their instructors. It is ideal for those coming either from pure mathematics or statistics backgrounds who wish to develop their understanding of association schemes.