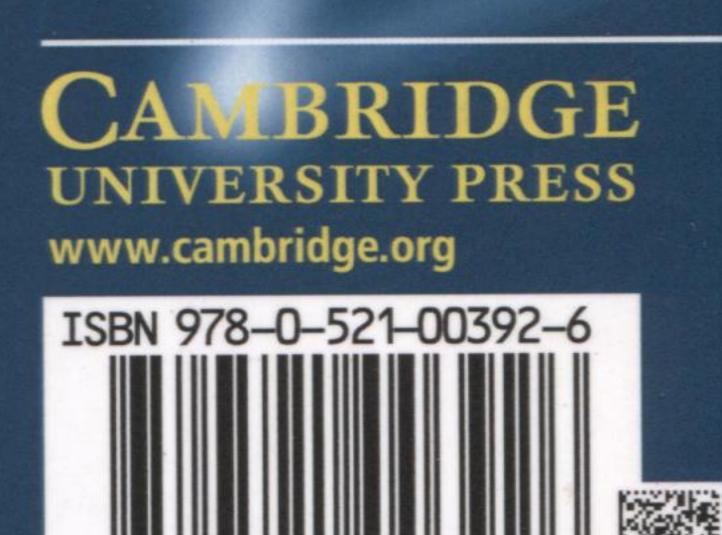
Cambridge Mathematical Textbooks

Now in its second edition, this text provides a modern introduction to the representation theory of finite groups. The authors have revised the popular first edition and added a considerable amount of new material. The theory is developed in terms of modules, since this is appropriate for more advanced work, but considerable emphasis is placed upon constructing characters. The character tables of many groups are given, including all groups of order less than 32, and all simple groups of order less than 1000.

Among the applications covered are Burnside's $p^a q^b$ theorem, the use of character theory in studying subgroup structure and permutation groups, and a description of how to use representation theory to investigate molecular vibration.

Each chapter is accompanied by a variety of exercises, and full solutions to all the exercises are provided at the end of the book. This will be ideal as a text for a course in representation theory, and, in view of the applications of the subject, will be of interest to mathematicians, chemists and physicists alike.



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