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Titolo	On Characters of Finite Groups / / by Michel Broué
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2017
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Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVI, 246 p. 9 illus., 5 illus. in color.)
Collana	Mathematical Lectures from Peking University, , 2197-4209
Disciplina	512.2
Soggetti	Group theory Categories (Mathematics) Algebra, Homological Group Theory and Generalizations Category Theory, Homological Algebra
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Tensor Product.-On Representation.-Characteristic 0 representations.-Playing with the base field -- Induction, restriction -- Brauer's theorem and some applications -- Graded representations and characters -- Drinfeld Double -- Appendix A. Basics on Finite Groups -- Appendix B. Assumed results on Galois theory -- Appendix C. Integral elements -- Appendix D. Noetherian rings and modules -- Appendix E. The language of categories and functors -- Bibliography 211.-Index.
Sommario/riassunto	This book explores the classical and beautiful character theory of finite groups. It does it by using some rudiments of the language of categories. Originally emerging from two courses offered at Peking University (PKU), primarily for third-year students, it is now better suited for graduate courses, and provides broader coverage than books that focus almost exclusively on groups. The book presents the basic tools, notions and theorems of character theory (including a new treatment of the control of fusion and isometries), and introduces readers to the categorical language at several levels. It includes and proves the major results on characteristic zero representations without any assumptions about the base field. The book includes a dedicated chapter on graded representations and applications of polynomial invariants of finite groups, and its closing chapter addresses the more

recent notion of the Drinfeld double of a finite group and the corresponding representation of  $GL_2(\mathbb{Z})$ .

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