Record Nr. UNISA996466585403316 Automorphism groups of compact bordered Klein surfaces: a **Titolo** combinatorial approach / / edited by Emilio Bujalance [and three others] Berlin, Germany; New York, New York:,: Springer-Verlag,, [1990] Pubbl/distr/stampa ©1990 **ISBN** 3-540-47180-4 Edizione [1st ed. 1990.] Descrizione fisica 1 online resource (XIII, 212 p.) Collana Lecture Notes in Mathematics, , 0075-8434; ; 1439 Classificazione 20B25 22D45 Disciplina 516.352 Soggetti Curves, Algebraic Riemann surfaces **Automorphisms** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Preliminary results -- Klein surfaces as orbit spaces of NEC groups --Normal NEC subgroups of NEC groups -- Cyclic groups of automorphisms of compact Klein surfaces -- Klein surfaces with groups of automorphisms in prescribed families -- The automorphism group of compact Klein surfaces with one boundary component -- The automorphism group of hyperelliptic compact Klein surfaces with boundary. Sommario/riassunto This research monograph provides a self-contained approach to the problem of determining the conditions under which a compact bordered Klein surface S and a finite group G exist, such that G acts as a group of automorphisms in S. The cases dealt with here take G cyclic. abelian, nilpotent or supersoluble and S hyperelliptic or with connected boundary. No advanced knowledge of group theory or hyperbolic geometry is required and three introductory chapters provide as much background as necessary on non-euclidean crystallographic groups. The graduate reader thus finds here an easy access to current research in this area as well as several new results obtained by means of the same unified approach.