Record Nr. UNISA996466610003316 Punctured torus groups and 2-bridge knot groups (I). // Hirotaka **Titolo** Akiyoshi Pubbl/distr/stampa Berlin, Germany;; New York, New York:,: Springer,, [2007] ©2007 **ISBN** 1-280-86407-9 9786610864072 3-540-71807-9 Edizione [1st ed. 2007.] Descrizione fisica 1 online resource (xliii, 252 p.) Lecture notes in mathematics;; 1909 Collana Disciplina 515.93 Torus (Geometry) Soggetti Knot theory Kleinian groups Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (pages [239]-243) and index. Nota di contenuto Jorgensen's picture of quasifuchsian punctured torus groups -- Fricke surfaces and PSL(2, ?)-representations -- Labeled representations and associated complexes -- Chain rule and side parameter -- Special examples -- Reformulation of Main Theorem 1.3.5 and outline of the proof -- Openness -- Closedness -- Algebraic roots and geometric roots. Sommario/riassunto This monograph is Part 1 of a book project intended to give a full account of Jorgensen's theory of punctured torus Kleinian groups and its generalization, with application to knot theory. Although Jorgensen's original work was not published in complete form, it has been a source of inspiration. In particular, it has motivated and guided Thurston's revolutionary study of low-dimensional geometric topology. In this monograph, we give an elementary and self-contained description of Jorgensen's theory with a complete proof. Through various informative illustrations, readers are naturally led to an intuitive, synthetic grasp of the theory, which clarifies how a very simple fuchsian group evolves into complicated Kleinian groups.