1. Record Nr. UNINA9910815312903321 Autore Schwartz Richard Evan Titolo Spherical CR geometry and Dehn surgery / / Richard Evan Schwartz Princeton:,: Princeton University Press,, 2007 Pubbl/distr/stampa **ISBN** 1-4008-3719-7 0-691-12810-3 Edizione [Course Book] Descrizione fisica 1 online resource (199 p.) Collana Annals of mathematics studies;; number 165 Classificazione SK 350 Disciplina 516.3/6 Soggetti CR submanifolds Dehn surgery (Topology) Three-manifolds (Topology) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references (pages [181]-184) and index. Nota di contenuto Frontmatter -- Contents -- Preface -- Part 1. Basic Material -- Part 2. Proof of the HST -- Part 3. The Applications -- Part 4. Structure of Ideal Triangle Groups -- Bibliography -- Index Sommario/riassunto This book proves an analogue of William Thurston's celebrated hyperbolic Dehn surgery theorem in the context of complex hyperbolic discrete groups, and then derives two main geometric consequences from it. The first is the construction of large numbers of closed real hyperbolic 3-manifolds which bound complex hyperbolic orbifolds-the only known examples of closed manifolds that simultaneously have these two kinds of geometric structures. The second is a complete understanding of the structure of complex hyperbolic reflection triangle groups in cases where the angle is small. In an accessible and straightforward manner, Richard Evan Schwartz also presents a large amount of useful information on complex hyperbolic geometry and discrete groups. Schwartz relies on elementary proofs and avoids "ations of preexisting technical material as much as possible. For this

reason, this book will benefit graduate students seeking entry into this emerging area of research, as well as researchers in allied fields such

as Kleinian groups and CR geometry.