Record Nr. UNINA9910255011903321 Autore Luo Yuan Titolo Economics of Database-Assisted Spectrum Sharing [[electronic resource] /] / by Yuan Luo, Lin Gao, Jianwei Huang Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-43231-1 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (X, 88 p. 25 illus.) Collana Wireless Networks, , 2366-1186 384.54524 Disciplina Soggetti Computer communication systems Electrical engineering Game theory Computer Communication Networks Communications Engineering, Networks Game Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Database-Assisted Spectrum Sharing -- Economics Theory Basics --Spectrum Trading Market Model -- Information Trading Market Model -- Hybrid Spectrum and Information Market Model -- Conclusion and Outlook. Sommario/riassunto This book examines the interaction between the technical and economic issues in database-assisted dynamic spectrum networks. It explains various business models for different network settings, analyzing the user behaviors and system equilibrium under each model. With the explosive growth of mobile devices and bandwidthhungry applications, radio spectrum is becoming increasingly congested and scarce. Database-assisted dynamic spectrum sharing is a promising technology for solving the problem of spectrum scarcity and congestion by allowing unlicensed mobile devices to dynamically access the under-utilized licensed spectrum resources through the assistance of a database. Database-assisted spectrum sharing network architecture has received wide and enthusiastic support from spectrum

regulators, standards bodies, and industrial organizations. This book

serves as a resource for researchers in white space communications and networking, for regulators in the wireless industry, and for graduate students and senior undergraduate students taking a course on network economics.