Record Nr. UNINA9910437597403321 Autore Ismail Muhammad Titolo Cooperative Networking in a Heterogeneous Wireless Medium [[electronic resource] /] / by Muhammad Ismail, Weihua Zhuang New York, NY:,: Springer New York:,: Imprint: Springer,, 2013 Pubbl/distr/stampa 1-4614-7079-X **ISBN** Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (90 p.) Collana SpringerBriefs in Computer Science, , 2191-5768 Disciplina 621.382 Soggetti Electrical engineering Computer system failures Coding theory Information theory Communications Engineering, Networks System Performance and Evaluation Coding and Information Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Introduction -- Decentralized Optimal Resource Allocation --Nota di contenuto Prediction Based Resource Allocation -- Resource Allocation for Singlenetwork and Multi-homing Services -- Conclusions and Future Directions. Sommario/riassunto This brief focuses on radio resource allocation in a heterogeneous wireless medium. It presents radio resource allocation algorithms with decentralized implementation, which support both single-network and multi-homing services. The brief provides a set of cooperative networking algorithms, which rely on the concepts of short-term call traffic load prediction, network cooperation, convex optimization, and decomposition theory. In the proposed solutions, mobile terminals play an active role in the resource allocation operation, instead of their

traditional role as passive service recipients in the networking

environment.