Record Nr. UNINA9910437957203321 Autore Zaki Yasir Titolo Future mobile communications: LTE optimization and mobile network virtualization / / Yasir Zaki Wiesbaden, : Springer Vieweg, 2013 Pubbl/distr/stampa **ISBN** 1-283-90958-8 3-658-00808-3 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (187 p.) Collana Advanced studies Disciplina 621.38 621.38456 Soggetti Mobile communication systems Long-Term Evolution (Telecommunications) Wireless communication systems 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. Nota di contenuto Long Term Evolution (LTE) -- LTE Radio Scheduler -- Wireless Network Virtualization -- Continuous Time Markov Chain (CTMC) -- Radio Scheduler Analytical Models -- LTE Network Simulator. Sommario/riassunto The key to a successful future mobile communication system lies in the design of its radio scheduler. One of the key challenges of the radio scheduler is how to provide the right balance between Quality of Service (QoS) guarantees and the overall system performance. Yasir Zaki proposes innovative solutions for the design of the Long Term Evolution (LTE) radio scheduler and presents several LTE radio scheduler analytical models that can be used as efficient tools for radio dimensioning. The author also introduces a novel wireless network virtualization framework and highlights the potential gains of using this framework for the future network operators. This framework enables the operators to share their resources and reduce their cost, thus achieving a better overall system performance and radio resource utilization. Contents - Long Term Evolution (LTE) - LTE Radio

Scheduler - Wireless Network Virtualization - Continuous Time Markov Chain (CTMC) - Radio Scheduler Analytical Models - LTE Network Simulator Target Groups Researchers and students in the field of

mobile communication networks, especially with a focus on radio access network design, wireless network virtualization, and radio access analytical modeling. Author Dr. Yasir Zaki completed his doctoral degree at the Communication Networks Group of TZI (Center for Communication and Information Technology), University of Bremen, Germany. He is a senior researcher and a lecturer at the Communication Networks Group, working in the field of future mobile communications and wireless network virtualization.