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Titolo	Contract Theory for Wireless Networks // by Yanru Zhang, Zhu Han
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Descrizione fisica	1 online resource (XII, 121 p. 35 illus.)
Collana	Wireless Networks, , 2366-1186
Disciplina	621.382
Soggetti	Computer communication systems Electrical engineering Management information systems Application software Computer Communication Networks Communications Engineering, Networks Business Information Systems Information Systems Applications (incl. Internet)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Background Introduction -- Incentive Mechanisms for Device-to-Device Communications in Cellular Networks with Adverse Selection -- Incentive Mechanism in Crowdsourcing with Moral Hazard -- Tournament Based Incentive Mechanism Designs for Mobile Crowdsourcing -- Multi-Dimensional Payment Plan in Fog Computing with Moral Hazard -- Financing Contract with Adverse Selection and Moral Hazard for Spectrum Trading in Cognitive Radio Networks -- Complementary Investment of Infrastructure and Service Providers in Wireless Network Virtualization -- Conclusion and Future Works.
Sommario/riassunto	This book presents theoretical research between wireless communications, networking, and economics using the framework of contract theory. This work fills a void in the literature by closely combining contract theoretical approaches with wireless networks design problems. Topics covered include classification in contract theory, reward design, adverse selection, and moral hazard. The authors also explore incentive mechanisms for device-to-device

communication in cellular networks, insurance plans for service assurance in cloud computing markets with incomplete information, multi-dimensional incentive mechanisms and tournament based incentive mechanisms in mobile crowdsourcing. Financial applications include financing contracts with adverse selection for spectrum trading in cognitive radio networks and complementary investment of infrastructure and service providers in wireless network visualization. This book offers a useful reference for engineers and researchers in the wireless communication community who seek to integrate the notions from contract theory and wireless engineering, while emphasizing on how contract theory can be applied in wireless networks. It is also suitable for advanced-level students studying information systems or communications engineering.

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