1. Record Nr. UNINA9910298990403321 Autore Gao Feifei Titolo Channel Estimation for Physical Layer Network Coding Systems / / by Feifei Gao, Chengwen Xing, Gongpu Wang Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2014 **ISBN** 3-319-11668-1 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (85 p.) Collana SpringerBriefs in Computer Science, , 2191-5768 Disciplina 004.6 Soggetti Coding theory Information theory Electrical engineering Signal processing Image processing Speech processing systems Computers Computer organization Coding and Information Theory Communications Engineering, Networks Signal, Image and Speech Processing Information Systems and Communication Service Computer Systems Organization and Communication Networks 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 at the end of each chapters. Nota di contenuto Fundamentals of Physical Layer Network Coding -- Background on Channel Estimation -- Channel Estimation for PLNC under Frequency Flat Fading Scenarios -- Channel Estimation for PLNC under Frequency Selective Fading Scenarios -- Channel Estimation for PLNC under Time-Selective Fading Scenarios -- Conclusions and Future Directions. Sommario/riassunto This SpringerBrief presents channel estimation strategies for the physical later network coding (PLNC) systems. Along with a review of

PLNC architectures, this brief examines new challenges brought by the

special structure of bi-directional two-hop transmissions that are

different from the traditional point-to-point systems and unidirectional relay systems. The authors discuss the channel estimation strategies over typical fading scenarios, including frequency flat fading, frequency selective fading and time selective fading, as well as future research directions. Chapters explore the performance of the channel estimation strategy and optimal structure of training sequences for each scenario. Besides the analysis of channel estimation strategies, the book also points out the necessity of revisiting other signal processing issues for the PLNC system. Channel Estimation of Physical Layer Network Coding Systems is a valuable resource for researchers and professionals working in wireless communications and networks. Advanced-level students studying computer science and electrical engineering will also find the content helpful.