Record Nr. UNINA9910254339503321 Autore Liu Cheng-Lin Titolo Consensus Problem of Delayed Linear Multi-agent Systems : Analysis and Design / / by Cheng-Lin Liu, Fei Liu Singapore:,: Springer Singapore:,: Imprint: Springer,, 2017 Pubbl/distr/stampa 981-10-2492-8 **ISBN** Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (X, 124 p. 62 illus., 3 illus. in color.) Collana SpringerBriefs in Control, Automation and Robotics, , 2192-6786 Disciplina 629.8 Soggetti Control engineering System theory **Physics** Control and Systems Theory Systems Theory, Control Applications of Graph Theory and Complex Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Introduction -- Preliminaries -- Consensus analysis of delayed multiagent systems -- Difference-compensated consensus algorithms --Predictor-based consensus algorithms -- Conclusions. Sommario/riassunto In the context of coupled-coordination control mechanisms, this book focuses on the delay robustness of consensus problems with asynchronously coupled and synchronously coupled consensus algorithms respectively. Moreover, constructive consensus algorithms that tolerate larger communication delays are proposed according to idea of compensation. By providing rigorous theoretical proofs and numerous numerical simulations, it enhances readers' understanding of the consensus coordination control mechanism of multi-agent systems

with communication delays.