1. Record Nr. UNINA9910781971903321 Autore Benthem Johan van <1949-> Titolo Logical dynamics of information and interaction / / Johan van Benthem [[electronic resource]] Cambridge: ,: Cambridge University Press, , 2011 Pubbl/distr/stampa **ISBN** 1-107-21746-6 1-283-37848-5 1-139-18903-4 9786613378484 1-139-18775-9 1-139-19034-2 1-139-18312-5 1-139-18544-6 0-511-97453-1 Descrizione fisica 1 online resource (xi, 373 pages) : digital, PDF file(s) Classificazione MAT018000 Disciplina 511.3 Soggetti Logic, Symbolic and mathematical Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Preface: 1. Logical dynamics, agency, and intelligent interaction: 2. Epistemic logic and semantic information; 3. Dynamic logic of public observation; 4. Multi-agent dynamic-epistemic logic; 5. Dynamics of inference and awareness; 6. Questions and issue management; 7. Soft information, correction, and belief change; 8. An encounter with probability: 9. Preference statics and dynamics: 10. Decisions, actions, and games; 11. Processes over time; 12. Epistemic group structure and collective agency: 13. Logical dynamics in philosophy: 14. Computation as conversation; 15. Rational dynamics in game theory; 16. Meeting cognitive realities; 17. Conclusion; Bibliography. Sommario/riassunto This book develops a view of logic as a theory of information-driven agency and intelligent interaction between many agents - with conversation, argumentation and games as guiding examples. It provides one uniform account of dynamic logics for acts of inference,

observation, questions and communication, that can handle both

update of knowledge and revision of beliefs. It then extends the dynamic style of analysis to include changing preferences and goals, temporal processes, group action and strategic interaction in games. Throughout, the book develops a mathematical theory unifying all these systems, and positioning them at the interface of logic, philosophy, computer science and game theory. A series of further chapters explores repercussions of the 'dynamic stance' for these areas, as well as cognitive science.