Record Nr. UNISA996466083003316 Autore Wansing Heinrich Titolo The Logic of Information Structures [[electronic resource] /] / by Heinrich Wansing Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 1993 **ISBN** 3-540-47642-3 Edizione [1st ed. 1993.] Descrizione fisica 1 online resource (CLXXX, 168 p.) Collana Lecture Notes in Artificial Intelligence;; 681 006.3 Disciplina Soggetti Artificial intelligence Mathematical logic Artificial Intelligence Mathematical Logic and Foundations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Generalizations -- Intuitionistic minimal and intuitionistic information Nota di contenuto processing -- Functional completeness for substructural subsystems of IPL -- Formulas-as-types for substructural subsystems of IPL --Constructive minimal and constructive information processing --Functional completeness for substructural subsystems of N -- The constructive typed ?-calculus ?c and formulas-as-types for N? --Monoid models and the informational interpretation of substructural propositional logics. This monograph gives a logical treatment of two central aspects of the Sommario/riassunto concept of information, namely information processing and information structure. The structure of information is treated as a topic in model theory, while information processing is seen as an aspect of proof theory. A wide spectrum of substructural subsystems of intuitionistic propositional logic and of Nelson's constructive logic with strong negation is investigated. In particular, the problems of cut-elimination, functional completeness, and coding of proofs with lambda-terms are handled. Finally, an interpretation of these systems in terms of states of information and operations over these states is presented.