1. Record Nr. UNISA996466013203316 Autore Wagner Gerd Titolo Vivid Logic [[electronic resource]]: Knowledge-Based Reasoning with Two Kinds of Negation / / by Gerd Wagner Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa , 1994 **ISBN** 3-540-48288-1 Edizione [1st ed. 1994.] Descrizione fisica 1 online resource (XIII, 155 p.) Collana Lecture Notes in Artificial Intelligence;; 764 006.3/3 Disciplina Soggetti Artificial intelligence Computer programming Mathematical logic Artificial Intelligence **Programming Techniques** Mathematical Logic and Formal Languages Mathematical Logic and Foundations Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali General introduction -- Vivid knowledge representation and reasoning Nota di contenuto -- Partiality, paraconsistency and constructivity -- Vivid reasoning on the basis of facts -- Lindenbaum-algebraic semantics of logic programs -- Logic programming with strong negation and inexact predicates -- Vivid reasoning on the basis of rules -- Further topics, open problems. Knowledge representation research is not only formal, it is also Sommario/riassunto descriptive and normative. Its aim is to implement a formal system which captures a practically relevant body of cognitive faculties employed by humans and capitalizes on its technical strength to extend human knowledge representation and reasoning capabilities. In this monograph, the author develops formalisms for his own notion of a vivid knowledge representation and reasoning system, characterized by the presence of two kinds of negation (weak and strong) and the requirements of restricted reflexivity, constructivity, and non-

explosiveness. The book is based on work carried out within an

interdisciplinary research project at the Free University of Berlin.