1. Record Nr. UNISA996465320303316 Autore Bürckert Hans-Jürgen Titolo A Resolution Principle for a Logic with Restricted Quantifiers [[electronic resource] /] / by Hans-Jürgen Bürckert Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 1991 **ISBN** 3-540-46670-3 Edizione [1st ed. 1991.] Descrizione fisica 1 online resource (XII, 120 p.) Collana Lecture Notes in Artificial Intelligence;; 568 006.3 Disciplina Soggetti Computers Artificial intelligence Mathematical logic Theory of Computation Artificial Intelligence 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 Preliminaries -- Unification -- A logic with restricted quantifiers --Nota di contenuto Equational constraint theories -- Conclusion. This monograph presents foundations for a constrained logic scheme Sommario/riassunto treating constraints as a very general form of restricted quantifiers. The constraints - or quantifier restrictions - are taken from a general constraint system consisting of constraint theory and a set of distinguished constraints. The book provides a calculus for this constrained logic based on a generalization of Robinson's resolution principle. Technically, the unification procedure of the resolution rule is replaced by suitable constraint-solving methods. The calculus is proven sound and complete for the refutation of sets of constrained clauses. Using a new and elegant generalization of the notion of a ground

instance, the proof technique is a straightforward adaptation of the

constrained logic scheme can be instantiated by well-known sorted logics or equational theories and also by extensions of predicate logics

classical proof technique. The author demonstrates that the

with general equational constraints or concept description languages.