Record Nr. UNISA996466066303316 Inconsistency Tolerance [[electronic resource] /] / edited by Leopoldo **Titolo** Bertossi, Anthony Hunter, Torsten Schaub Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2005 **ISBN** 3-540-30597-1 Edizione [1st ed. 2005.] Descrizione fisica 1 online resource (VIII, 300 p.) Theoretical Computer Science and General Issues, , 2512-2029;; 3300 Collana Disciplina 620/.0045 Soggetti Database management Computer science Software engineering Machine theory **Database Management** Computer Science Logic and Foundations of Programming Software Engineering Formal Languages and Automata Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto to Inconsistency Tolerance -- Consistency of XML Specifications --Consistent Query Answers in Virtual Data Integration Systems --Representing Paraconsistent Reasoning via Quantified Propositional Logic -- On the Computational Complexity of Minimal-Change Integrity Maintenance in Relational Databases -- On the Complexity of Paraconsistent Inference Relations -- Approaches to Measuring Inconsistent Information -- Inconsistency Issues in Spatial Databases -- Relevant Logic and Paraconsistency. Sommario/riassunto Inconsistency arises in many areas in advanced computing. Often inconsistency is unwanted, for example in the specification for a plan or in sensor fusion in robotics; however, sometimes inconsistency is useful. Whether inconsistency is unwanted or useful, there is a need to develop tolerance to inconsistency in application technologies such as databases, knowledge bases, and software systems. To address this situation, inconsistency tolerance is being built on foundational

technologies for identifying and analyzing inconsistency in information, for representing and reasoning with inconsistent information, for resolving inconsistent information, and for merging inconsistent information. The idea for this book arose out of a Dagstuhl Seminar on the topic held in summer 2003. The nine chapters in this first book devoted to the subject of inconsistency tolerance were carefully invited and anonymously reviewed. The book provides an exciting introduction to this new field.