1. Record Nr. UNISA996465432703316 Logic Programming, Knowledge Representation, and Nonmonotonic **Titolo** Reasoning [[electronic resource]]: Essays Dedicated to Michael Gelfond on the Occasion of His 65th Birthday / / edited by Marcello Balduccini, Tran Cao Son Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2011 **ISBN** 3-642-20832-0 Edizione [1st ed. 2011.] Descrizione fisica 1 online resource (XIII, 513 p.) Collana Lecture Notes in Artificial Intelligence;; 6565 Disciplina 006.3 Soggetti Artificial intelligence Mathematical logic Computer programming Artificial Intelligence Mathematical Logic and Formal Languages **Programming Techniques** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Opening: Homage to Michael Gelfond on His 65th Birthday --Foundations: ASP and Theories of LP, KR, and NMR: Answer Set Programming's Contributions to Classical Logic: An Analysis of ASP Methodology -- Closure and Consistency Rationalities in Logic-Based Argumentation -- Manifold Answer-Set Programs and Their Applications -- On the Minimality of Stable Models -- Challenges in Answer Set Solving -- Exploring Relations between Answer Set Programs -- Compact Translations of Non-disjunctive Answer Set Programs to Propositional Clauses -- Effectively Reasoning about Infinite Sets in Answer Set Programming -- Inspecting Side-Effects of Abduction in Logic Programs -- Argumentation and Answer Set Programming -- Interlude: Cantor's Paradise Regained: Constructive Mathematics from Brouwer to Kolmogorov to Gelfond -- Interlude:

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## Sommario/riassunto

This Festschrift volume, published in honor of Michael Gelfond on the occasion of his 65th birthday, contains a collection of papers written by his closest friends and colleagues. Several of these papers were presented during the Symposium on Constructive Mathematics in Computer Science, held in Lexington, KY, USA on October 25-26, 2010. The 27 scientific papers included in the book focus on answer set programming. The papers are organized in sections named "Foundations: ASP and Theories of LP, KR, and NMR", "ASP and Dynamic Domains", and "ASP – Applications and Tools".