1.	Record Nr.	UNINA9910300152203321
	Titolo	Advances in Natural Deduction : A Celebration of Dag Prawitz's Work / / edited by Luiz Carlos Pereira, Edward Haeusler, Valeria de Paiva
	Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2014
	ISBN	94-007-7548-2
	Edizione	[1st ed. 2014.]
	Descrizione fisica	1 online resource (288 p.)
	Collana	Trends in Logic, Studia Logica Library, , 1572-6126 ; ; 39
	Disciplina	160
	Soggetti	Logic Logic, Symbolic and mathematical Mathematical Logic and Formal Languages Mathematical Logic and Foundations
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references at the end of each chapters.
	Nota di contenuto	Chapter 1. Generalizaed elimination inferences; Schroeder-Heister, Peter -- Chapter 2. Revisiting Zucker's work on the Correspondence between Cut-Elimination and Normalisation; Urban, Christian -- Chapter 3. Proofs, Reasoning and the Metamorphosis of Logic; Joinet, Jean-Baptiste -- Chapter 4. Natural Deduction for Equality: The Missing Entity; de Quieroz, Ruy J.G.B. and de Oliveira, Anjolina G -- Chapter 5. Proof-theoretical Conception of Logic; Legris, Javier -- Chapter 6. On the Structure of Natural deduction Derivations for "Generally"; Vana, Leonardo B., Veloso, Paulo A.S. , and Veloso, Sheila R.M -- Chapter 7. Type Theories from Barendregt's Cube for Theorem Provers; Seldin, Jonathan P -- Chapter 8. What is propositional logic, a theory of, if anything?; Chateaubriand, Oswaldo -- Chapter 9. Categorical Semantics of Linear Logic for All; de Paiva, Valeria -- Chapter 10. Rough sets and proof-theory; Bellin, Gianluigi -- Chapter 11. Decomposition of Reduction; Zimmermann, Ernst -- Chapter 12. An approach to general proof theory and a conjecture of a kind of completeness of intuitionistic logic revisited; Prawitz, Dag.
	Sommario/riassunto	This collection of papers celebrating the contributions of Swedish logician Dag Prawitz to Proof Theory, has been assembled from those presented at the Natural Deduction conference organized in Rio de

Janeiro to honour his seminal research. Dag Prawitz's work forms the basis of intuitionistic type theory and his inversion principle constitutes the foundation of most modern accounts of proof-theoretic semantics in Logic, Linguistics and Theoretical Computer Science. The range of contributions includes material on the extension of natural deduction with higher-order rules, as opposed to higher-order connectives, and a paper discussing the application of natural deduction rules to dealing with equality in predicate calculus. The volume continues with a key chapter summarizing work on the extension of the Curry-Howard isomorphism (itself a by-product of the work on natural deduction), via methods of category theory that have been successfully applied to linear logic, as well as many other contributions from highly regarded authorities. With an illustrious group of contributors addressing a wealth of topics and applications, this volume is a valuable addition to the libraries of academics in the multiple disciplines whose development has been given added scope by the methodologies supplied by natural deduction. The volume is representative of the rich and varied directions that Prawitz work has inspired in the area of natural deduction. .