1. Record Nr. UNINA9910349539103321

Titolo	Model-Based Reasoning in Science and Technology : Inferential Models for Logic, Language, Cognition and Computation / / edited by Ángel Nepomuceno-Fernández, Lorenzo Magnani, Francisco J. Salguero-Lamillar, Cristina Barés-Gómez, Matthieu Fontaine
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-32722-1
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (510 pages)
Collana	Studies in Applied Philosophy, Epistemology and Rational Ethics, , 2192-6263 ; ; 49
Disciplina	128
Soggetti	Knowledge, Theory of Cognitive psychology Artificial intelligence Sociology - Methodology Epistemology Cognitive Psychology Artificial Intelligence Sociological Methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	This book discusses how scientific and other types of cognition make use of models, abduction, and explanatory reasoning in order to produce important and innovative changes in theories and concepts. Gathering revised contributions presented at the international conference on Model-Based Reasoning (MBR18), held on October 24–26 2018 in Seville, Spain, the book is divided into three main parts. The first focuses on models, reasoning, and representation. It highlights key theoretical concepts from an applied perspective, and addresses issues concerning information visualization, experimental methods, and design. The second part goes a step further, examining abduction, problem solving, and reasoning. The respective papers assess different

types of reasoning, and discuss various concepts of inference and creativity and their relationship with experimental data. In turn, the third part reports on a number of epistemological and technological issues. By analyzing possible contradictionsin modern research and describing representative case studies, this part is intended to foster new discussions and stimulate new ideas. All in all, the book provides researchers and graduate students in the fields of applied philosophy, epistemology, cognitive science, and artificial intelligence alike with an authoritative snapshot of the latest theories and applications of model-based reasoning.