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Autore	Frigg Roman
Titolo	Modelling Nature: An Opinionated Introduction to Scientific Representation // by Roman Frigg, James Nguyen
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Disciplina	511.8
Soggetti	Knowledge, Theory of Physics - Philosophy Logic, Symbolic and mathematical Science - Philosophy Epistemology Philosophical Foundations of Physics and Astronomy Mathematical Logic and Foundations Philosophy of Science
Lingua di pubblicazione	Inglese
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Nota di contenuto	Preface -- Introduction -- 1. Problems Concerning Scientific Representation -- 2. General Griceanism and Stipulative Fiat -- 3. The Similarity View -- 4. The Structuralist View -- 5. The Inferential View -- 6. The Fiction View of Models -- 7. Representation-As -- 8. The DEKI Account -- 9. DEKI Goes Forth.
Sommario/riassunto	This monograph offers a critical introduction to current theories of how scientific models represent their target systems. Representation is important because it allows scientists to study a model to discover features of reality. The authors provide a map of the conceptual landscape surrounding the issue of scientific representation, arguing that it consists of multiple intertwined problems. They provide an encyclopaedic overview of existing attempts to answer these questions, and they assess their strengths and weaknesses. The book also presents a comprehensive statement of their alternative proposal, the

DEKI account of representation, which they have developed over the last few years. They show how the account works in the case of material as well as non-material models; how it accommodates the use of mathematics in scientific modelling; and how it sheds light on the relation between representation in science and art. The issue of representation has generated a sizeable literature, which has been growing fast in particular over the last decade. This makes it hard for novices to get a handle on the topic because so far there is no book-length introduction that would guide them through the discussion. Likewise, researchers may require a comprehensive review that they can refer to for critical evaluations. This book meets the needs of both groups.
