Record Nr. UNINA9910918595403321 Autore Resch Michael M Titolo The Science and Art of Simulation: Trust in Science / / edited by Michael M. Resch, Nico Formánek, Ammu Joshy, Andreas Kaminski Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031680588 3031680588 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (271 pages) Altri autori (Persone) FormánekNico JoshyAmmu KaminskiAndreas Disciplina 510 Soggetti Mathematics Computer science Philosophy Computer Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Synopsis of Contributions -- Introduction -- Philosophy of Trust --Nota di contenuto Heresy and Honor. A Historical Perspective on Trust in Science --Trusting Science: Is There Reasonable Distrust of Reputable Scientific Authority? -- Can There Be an Epistemic Authority? -- Trust Science With What? Trust-Building Dialogue between Scientists and the Public Trust in Science -- Scientific Experts, Epistemic Wisdom, and Justified Trust -- Confidence: Calibrating Trust in Science Trust and Policy --Trust in Science During global challenges: the pandemic and trustworthy AI -- Science, Shame, and Trust: Against Shaming Policies, Sociological, Communicative and Media Aspects of Trust in Science. Establishing Trust in Algorithmic Results: Ground Truth Simulations and the First Empirical Images of a Black Hole -- Trust and Science Communication in the Internet Era: The Case of Mainstream Climate Blogging -- Emancipatory Data Literacy and the Value of Trust -- Only a Theory? Substantive and Methodological Strategies for Regaining

Sommario/riassunto Trust is a central pillar of the scientific enterprise. Much work in the

Trust in Science -- Undermining Trust in Science: No Fraud Required.

philosophy of science can be seen as coping with the problem of establishing trust in a certain theory, a certain model or even science as a whole. However, trust in science is threatened by various developments. With the advent of more complex models and the increasing usage of computer methods such as machine learning and computer simulation it seems increasingly challenging to establish trust in science. How and on what basis can an appropriate trust in science be founded? Should it be only for experts or also for a wider public? Which role do computational methods play in establishing or eroding trust? In this volume scientists from many backgrounds offer their answers to these questions.