1. Record Nr. UNINA9910830388003321 Autore Sigrist Jean-Francois Titolo Numerical simulation, an art of prediction 1: theory // Jean-Francois Sigrist Pubbl/distr/stampa London, England; ; Hoboken, New Jersey:,: ISTE:,: Wiley,, [2019] ©2019 **ISBN** 1-119-68667-9 1-119-68671-7 1-119-68679-2 Edizione [1st edition] Descrizione fisica 1 online resource (251 pages) Disciplina 511.8 Soggetti Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Numerical simulation is a technique of major importance in various technical and scientific fields. Used to understand diverse physical phenomena or to design everyday objects, it plays a major role in innovation in the industrial sector. Whilst engineering curricula now include training courses dedicated to it, numerical simulation is still not well-known in some economic sectors, and even less so among the general public. Simulation involves the mathematical modeling of the real world, coupled with the computing power offered by modern technology. Designed to perform virtual experiments, digital simulation can be considered as an "art of prediction". Embellished with a rich iconography and based on the testimony of researchers and engineers. this book shines a light on this little-known art. It is the first of two volumes and focuses on the principles, methods and industrial practice of numerical modeling.