

Models of science dynamics: encounters between complexity theory and information sciences

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20410667&lokasi=lokal>

Abstrak

This volume, reviewing and describing major threads in the mathematical modeling of science dynamics for a wider academic and professional audience. The model classes presented cover stochastic and statistical models, system-dynamics approaches, agent-based simulations, population-dynamics models, and complex-network models. The book comprises an introduction and a foundational chapter that defines and operationalizes terminology used in the study of science, as well as a review chapter that discusses the history of mathematical approaches to modeling science from an algorithmic-historiography perspective. It concludes with a survey of remaining challenges for future science models and their relevance for science and science policy.