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Nota di contenuto	A Brief Review of Some Swarming Models using Stochastic Differential Equations -- Copula-based estimation of Value at Risk for the portfolio problem -- An Overview of Exact Solution Methods for Guaranteed Minimum Death Benefit Options in Variable Annuities -- Determinantal reinforcement learning with techniques to avoid poor local optima -- Surface Denoising based on Normal Filtering in a Robust Statistics Framework -- Mathematical Modeling and Inverse Problem Approaches for Functional -- Clothing Design based on Thermal Mechanism -- Unique continuation on a sphere for Helmholtz equation and its numerical treatments -- Notes on Backward Stochastic Differential Equations for Computing XVA.
Sommario/riassunto	This volume includes selected technical papers presented at the Forum "Math-for-Industry" 2018. The papers written by eminent researchers and academics working in the area of industrial mathematics from the viewpoint of financial mathematics, machine learning, neural networks, inverse problems, stochastic modelling, etc., discuss how the ingenuity of science, technology, engineering and mathematics are and will be

expected to be utilized. This volume focuses on the role that mathematics-for-industry can play in interdisciplinary research to develop new methods. The contents are useful for researchers both in academia and industry working in interdisciplinary sectors.
