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Sommario/riassunto	This open access book provides an introduction to uncertainty quantification in engineering. Starting with preliminaries on Bayesian statistics and Monte Carlo methods, followed by material on imprecise probabilities, it then focuses on reliability theory and simulation methods for complex systems. The final two chapters discuss various aspects of aerospace engineering, considering stochastic model updating from an imprecise Bayesian perspective, and uncertainty quantification for aerospace flight modelling. Written by experts in the subject, and based on lectures given at the Second Training School of the European Research and Training Network UTOPIAE (Uncertainty Treatment and Optimization in Aerospace Engineering), which took place at Durham University (United Kingdom) from 2 to 6 July 2018, the book offers an essential resource for students as well as scientists and practitioners.

