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Sommario/riassunto

This book deals with several types of multi-dimensional control problems in the face of data uncertainty for vector cases—multi-dimensional multi-objective control problem with uncertain objective functionals, uncertain constraint functionals, and uncertain objective as well as constraint functionals, uncertain multi-dimensional multi-objective control problem with semi-infinite constraints, uncertain dual multi-dimensional multi-objective variational control problem, and second-order PDE&PDI constrained robust optimization problem. The book provides the solution approaches—an exact  $L_1$  penalty function approach, modified objective approach, robust approach—in the simplest way to solve the recent developing optimization problems in the sense of uncertainty. .