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Sommario/riassunto	<p>This book collects papers from the Special Issue "Singularly Perturbed Problems: Asymptotic Analysis and Approximate Solution", published in Axioms. These papers cover different aspects of singular perturbation theory and its applications: axiomatic approach in the analytic theory of singular perturbations; asymptotic solution of various types of singularly perturbed integral–differential and integral equations with weakly and rapidly varying kernels of the integral operators; propagation of two-dimensional periodic perturbations in a viscous continuously stratified fluid; asymptotic analysis of the stochastic linear–quadratic optimal control problem with two fast timescales in the dynamics; asymptotic solution of singularly perturbed Cauchy problem for different types of differential equations with "simple" turning points; asymptotic analysis of the complete Euclidean space controllability for different types of singularly perturbed differential systems with time delays; asymptotic solution of singularly perturbed systems in the critical case by the orthogonal projector method; application of the direct scheme method to asymptotic solution of one class of optimal control problems with three-tempo state variables; asymptotic analysis and solution of a cheap control linear quadratic zero-sum differential game; analysis of asymptotic behavior of the solutions for one class of singularly perturbed Neumann boundary value problems .</p>

