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Sommario/riassunto	This book analyzes the problems to be solved urgently in the development of launch vehicle control system. The techniques of redundant Inertial Measurement Unit (IMU) reconfiguration and trajectory replanning are proposed aiming at the inertial device failures and power system failures during flight of launch vehicles, respectively. It introduces the background of redundant IMU reconfiguration and trajectory replanning technologies and models of launch vehicle dynamics and redundant strap-down IMUs. The approaches for redundant strap-down IMU fault detection, reconfiguration and trajectory replanning are proposed, putting forward a prospect for the development of launch vehicle control system. The content of this book is concise and highly pragmatic. It could serve as a reference for engineers and researchers engaged in the analysis, design and verification of launch vehicle control systems and also as a reference for graduate students and senior undergraduates majoring in

navigation,guidance and control.