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Nota di contenuto	Background and Motivation -- Local Diffusion -- Radial Diffusion -- Adiabatic Transport -- Magnetospheric Convection -- Summary.
Sommario/riassunto	This thesis focuses on the construction and application of an electron radiation belt kinetic model including various adiabatic and non-adiabatic processes. The terrestrial radiation belt was discovered over 50 years ago and has received a resurgence of interest in recent years. The main drivers of radiation belt research are the fundamental science questions surrounding its complex and dramatic dynamics and particularly its potential hazards posed to space-borne systems. The establishment of physics-based radiation belt models will be able to identify the contributions of various mechanisms, forecast the future radiation belt evolution, and then mitigate its adverse space weather

effects. Dr. Su is now a Professor works in Department of Geophysics and Planetary Sciences, University of Science and Technology of China, Hefei, China. .
