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Sommario/riassunto	"The International System of Units, the SI, provides the foundation for all measurements in science, engineering, economics, and society. The SI has been fundamentally revised in 2019. The new SI is a universal and highly stable unit system based on invariable constants of nature. Its implementation rests on quantum metrology and quantum standards, which base measurements on the manipulation and counting of single quantum objects, such as electrons, photons, ions, and flux quanta. This book explains and illustrates the new SI, its impact on measurements, and the quantum metrology and quantum technology behind it. The book is based on the book 'Quantum Metrology: Foundation of Units and Measurements' by the same

authors. From the contents: Measurement; The SI (Système International d'Unités); Realization of the SI Second: Thermal Beam Cs Clock, Laser Cooling, and the Cs Fountain Clock; Flux Quanta, Josephson Effect, and the SI Volt; Quantum Hall Effect, the SI Ohm, and the SI Farad; Single-Charge Transfer Devices and the SI Ampere; The SI Kilogram, the Mole, and the Planck Constant; The SI Kelvin and the Boltzmann Constant; Beyond the present SI: Optical Clocks and Quantum Radiometry; Outlook."
