The Quantum Beat



Filesize: 2.12 MB

Reviews

Absolutely essential go through ebook. It typically does not cost a lot of. I realized this publication from my i and dad encouraged this publication to discover. (Mallie Ondricka)

THE QUANTUM BEAT



To download **The Quantum Beat** eBook, remember to refer to the hyperlink beneath and download the document or have access to other information which are have conjunction with THE QUANTUM BEAT book.

Springer Feb 2010, 2010. Taschenbuch. Book Condition: Neu. 235x155x26 mm. This item is printed on demand -Print on Demand Titel. - This work attempts to convey a broad understanding of the physical principles underlying the workings of these quantum-based atomic clocks, with introductory chapters placing them in context with the early development of mechanical clocks and the introduction of electronic time-keeping as embodied in the quartz-controlled clocks. While the book makes no pretense at being a history of atomic clocks, it nevertheless takes a historical perspective in its treatment of the subject. Intended for nonspecialists with some knowledge of physics or engineering, The Quantum Beat covers a wide range of salient topics relevant to atomic clocks, treated in a broad intuitive manner with a minimum of mathematical formalism. Detailed descriptions are given of the design principles of the rubidium, cesium, hydrogen maser, and mercury ion standards; the revolutionary changes that the advent of the laser has made possible, such as laser cooling, optical pumping, the formation of 'optical molasses,' and the cesium 'fountain' standard; and the time-based global navigation systems, Loran-C and the Global Positioning System. Also included are topics that bear on the precision and absolute accuracy of standards, such as noise, resonance line shape, the relativistic Doppler effect as well as more general relativistic notions of time relevant to synchronization of remote clocks, and time reversal symmetry. This edition retains the essentially didactic approach to the treatment of the development of atomic clocks in the first edition, but brings up to date the extraordinary developments in recent years, culminating in clocks based on quantum resonance at optical frequency in individual ions confined in miniature electromagnetic traps. These, together with advances in the generation of wide-band coherent frequency combs spanning the spectrum as far as the optical range,...

- Read The Quantum Beat Online
- Download PDF The Quantum Beat

Other eBooks

PDF	

[PDF] The Pickthorn Chronicles

Click the web link listed below to get "The Pickthorn Chronicles" document. Read PDF »



[PDF] Angels Among Us: 52 Humorous and Inspirational Short Stories: Lifes Outtakes - Year 7

Click the web link listed below to get "Angels Among Us: 52 Humorous and Inspirational Short Stories: Lifes Outtakes - Year 7" document. Read PDF »



[PDF] Carmilla

Click the web link listed below to get "Carmilla" document. Read PDF »



[PDF] Memoirs of Robert Cary, Earl of Monmouth Click the web link listed below to get "Memoirs of Robert Cary, Earl of Monmouth" document. Read PDF »



[PDF] Programming in D

Click the web link listed below to get "Programming in D" document. Read PDF »



[PDF] Yearbook Volume 15

Click the web link listed below to get "Yearbook Volume 15" document. Read PDF »