

1. Record Nr.	UNINA9910743684303321
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Titolo	An Introduction to Modern Timekeeping and Time Transfer // by Parameswar Banerjee, Demetrios Matsakis
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031307805 3031307801
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (312 pages)
Collana	Springer Series in Measurement Science and Technology, , 2198-7815
Altri autori (Persone)	MatsakisDemetrios
Disciplina	681.11
Soggetti	Measurement Measuring instruments Atoms Metrology Telecommunication Geographic information systems Electrical engineering Measurement Science and Instrumentation Metrology and Fundamental Constants Communications Engineering, Networks Geographical Information System Electrical and Electronic Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Time and Its Definition -- Pre-Atomic Timekeeping -- Introduction of Atomic Clock -- Frequency Stability -- Time and Frequency Measurements -- Early Time Transfer Modes.
Sommario/riassunto	This book provides a comprehensive, systematic description of modern timekeeping and its specializations. Introductory chapters discuss the concept of time and its definition, then briefly look at pre-Atomic Era timekeeping to set the stage for the introduction of the atomic clock. Subsequent chapters focus on concepts such as frequency stability and measurement uncertainty, as well as computer network time- synchronization protocols including Network Time Protocol (NTP) and

Precise Time Protocol (PTP). The book then delves into the nuts and bolts of the Global Navigation Satellite Systems (GNSS), Two-Way Satellite Time and Frequency Transfer, and Optical Time and Frequency Transfer. Timescale theory is then described as a way to combine clock data, and the algorithms and procedures used to generate Coordinated Universal Time (UTC) are given. Finally, there is a look at modern applications of timekeeping and time transfer. Featuring a glossary of all key terms, this book is highly recommended for trained or incoming physicists, engineers, or mathematicians working, for example, in manufacturing or timing laboratories. Additionally, it is suitable for use in introductory university courses dealing with the subject of timekeeping.
