Record Nr. UNINA9911034944603321 Autore Luo Jun **Titolo** Proceedings of the 7th International Workshop on the TianQin Science Mission; 25–26 April 2024, Hong Kong SAR, China: Progress on the TianQin Science Mission and in Gravitational Wave Detection / / edited by Jun Luo, Vadim Milyukov, Ze-Bing Zhou, Hsien-Chi Yeh, Jianwei Mei Singapore: .: Springer Nature Singapore: .: Imprint: Springer, . 2025 Pubbl/distr/stampa **ISBN** 981-9678-03-X Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (378 pages) Springer Proceedings in Physics, , 1867-4941;; 428 Collana Altri autori (Persone) MilyukovVadim ZhouZe-Bing YehHsien-Chi MeiJianwei Disciplina 520 Soggetti Astronomy **Astrophysics** Gravitation Astronomy, Observations and Techniques **Gravitational Physics** Classical and Quantum Gravity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. Ten Years of TianQin Project -- 2. A brief introduction to the TianQin project -- 3. Gravitational Wave Astrophysics with TianQin -- 4. Primordial Intermediate-mass Binary Black Holes as Targets for Space Laser Interferometers -- 5. Gravitational wave and radio observations of Galactic inspiraling double neutron stars. Sommario/riassunto This book contains the key themes and insights from the presentations and posters presented at the Seventh International Workshop on the TianQin Science Mission (TQ7). TianQin, a Chinese space-based gravitational wave detection mission was initiated in 2014 and has since achieved several significant milestones, including the launch of

the TianQin-1 experimental satellite. The construction of the TianQin-2 experimental satellites is currently underway, with a projected launch

date set for 2026. These advancements are laying the groundwork for the TianQin-3 gravitational wave detection mission with the target launch around 2035. The book documents progress in the TianQin project ranging from scientific research to technological innovation and data analysis. Additionally, it provides updates on other gravitational wave detection missions, such as LISA, DECIGO, CPTA, and AliCPT. It serves as a valuable resource for professionals in the field and for anyone with a keen interest in the ongoing advancements in space science.