

Core Measurement Electronic System for Space Gravitational Wave Detection

Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, China

Tao Yu

Email: yut@ciomp.ac.cn

Space gravitational wave detection uses a three-satellite formation, and the distance between satellites can reach millions of kilometers. According to the principle of laser heterodyne interferometry, gravitational wave events can be measured through small distance changes in the inertial reference between satellites. Picometer-level measurement sensitivity is an internationally recognized challenge. The core measurement electronic system is designed to meet the requirements of inertial reference construction and laser heterodyne interferometry. Research work on core measurement electronic system is being gradually implemented, improved and integrated. Here, we introduce the research progress and follow-up planning of the core measurement electronic system.



Short Bio:

Tao Yu received his M.S degree in Jilin University, China. He is an associate professor of CIOMP, China. Distinguished key research position, CAS, Master Supervisor and engaged in research on inertial sensor and laser interferometry technology. Project leader of the national key R & D program of the Ministry of Science and Technology.