Astronomy Seminar

Prof. Hideyuki Kobayashi

(NAOJ)

Title: Introduction of VLBI research in Japan and the low-frequency VLBI observation plan with SKA LOW

Speaker: Prof. Hideyuki Kobayashi (NAOJ)

Time: 10:00-11:00, 13 November (Wednesday), Shanghai time

Host: Yosuke Mizuno

Location: N600

Join Tencent Meeting： https://meeting.tencent.com/dm/JuicAOXxeMDV

Meeting ID: 190865878 (no password)

Abstract:

Japanese VLBI research began in earnest after the construction of the Nobeyama 45-m radio telescope in the 1980s, and in the 1990s the world's first space VLBI observation program(VSOP) was carried out, and in the 2000s the VLBI astrometry project (VERA) was promoted. Since then, we have been working with China and South Korea to build the East Asian VLBI network and promote research. I will introduce these projects and some science results, and also introduce the possibilities for research using a low-frequency VLBI network in conjunction with the construction of the SKA LOW in Australia as one direction for future VLBI research in Asia and Oceania.

Biography:

Prof. Hideyuki Kobayashi is a Professor of National Astronomical Observatory of Japan (NAOJ). He served as the Director of Mizusawa VLBI Observatory of NAOJ from 2002 to 2010, the Deputy director-general of NAOJ from 2010 to 2018 and led the SKA1 study group of NAOJ from 2018 to 2024. He is now a PIFI visiting professor at Shanghai Astronomical observatory since July 1st, 2024.

Prof. Hideyuki Kobayashi has fruitful experiences in the field of radio astronomy. As Science lead of HALCA satellite, led the development of radio astronomy system of the satellite and achieved the success of first VLBI satellite and space VLBI observation with ground radio telescopes in the world. And as a project manager of development VLBI correlator in Japan, led the development of first large VLBI correlator in Japan and the operations for the VLBI Space Observatory Program (VSOP) with HALCA and more than 20 ground radio telescopes. As Lead of construction of VERA and director of Mizusawa VLBI Observatory, led the construction of four 20-m radio telescopes and achieved 10-micro-arc-sencond accuracy measurements of annual parallaxes for Galactic maser objects. As a vice-director of NAOJ, led the funding for Japanese ALMA commitments and the construction of Japanese contribution for ALMA. As Chair of East Asia VLBI consortium, led the organization of East Asian VLBI network with Chinese, Korean, and Japanese VLBI stations for astronomy, which is a largest VLBI array in the world. As Lead of SKA1 project of NAOJ, led the establishment of the project in NAOJ and organize fund raising to join SKA project from Japan.

Astronomy and Astrophysics Division
天文与天体物理研究部