

**The mission of Chinese Space VLBI and Laser Ranging supports for Space VLBI satellites
with Retro-reflectors (POSTER)**

Shen zhiqiang, Zhang zhongping, **Zhang Haifeng**, Wu zhibo, Chen WanZhen
Shanghai Astronomical Observatory, Chinese Academy of Sciences, China
hfzhang@shao.ac.cn

The mission of Chinese Space VLBI has been taken into the agenda since 2009 to construct the larger base-line VLBI observations in conjunction with the global VLBI network. In the first stage, the two space VLBI telescopes with aperture of 10 meter will be built at the orbit altitude 1,200~60,000km in next decades years. For precise orbit measurement for Space VLBI satellites and construction of a high-precision celestial coordinate frame, SLR technology will be adopted while satellites at the distance of over 10,000km and the laser retro-reflector will be made by Shanghai Astronomical Observatory. In order to meet the requirement of large effective area and light weight, the concept of the annular-planar retro-reflector arrays around the satellite-ground communicating link antenna will be adopted.