

## The Space VLBI Program VSOP-2

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VSOP-2 is the space VLBI program with the spacecraft ASTRO-G to be launched in 2014 - 2015 by the JAXA (Japan Aerospace eXploration Agency). Combination with ground radio telescopes, the network will offer extreme resolutions of 240, 87, and 40 microarcsec at 8, 22, and 43 GHz, respectively, and will unveil astrophysical phenomena such as accretion disks of active galactic nuclei (AGNs), footpoints of AGN jets, magnetospheres in the vicinity of young stellar objects, galactic and extragalactic masers, and so on.

Mesh antenna with a 9-m diameter, dual polarization reception, cooled on-board receivers, and 1-Gbps high-speed sampler will realize 10-times better sensitivity, higher frequency and polarimetry. Cross correlation process will be done in the Korea-Japan Joint VLBI Correlator (KJJVC) that is being developed by KASI and NAOJ and will be operated in Seoul. VSOP-2 is an open-use observatory and will call for proposals from worldwide. I will introduce the scientific and technical aspects of the mission.



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