

Current Status of Greenland Telescope (GLT)

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M87 is a promising candidate to reveal the shadow image of its Supermassive Black Hole (SMBH). Greenland Telescope (GLT) project is aiming to image the SMBH shadow using submillimeter VLBI technique together with other submillimeter telescopes like the Phased ALMA in Chile, and JCMT/SMA in Hawaii. The big triangle formed by GLT-ALMA-JCMT/SMA provides 20 micro arcsecond resolutions at 350 GHz towards M87, whose shadow size are expected to be about 40 micro arcsecond. LMT in Mexico is located almost at the center of the big triangle, and other Event Horizon Telescope (EHT) antennas would provide the high quality image of the shadow. GLT project is led by ASIAA, Taiwan, collaborating with SAO, MIT Haystack Observatory, NRAO, NAOJ, and Osaka Prefecture University. Main components of the GLT antenna are already shipped to Thule, Greenland, and currently we are reassembling. We are planning to make initial VLBI observations in early 2018. We will also arrange the infrastructures of the final destination, the summit of Greenland. In this presentation, we will report the current status of the telescope.