Measurements of Precipitable Water Vapour for the Africa Millimetre Telescope

Contributed Talk //

Instrumentation

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The first images of the shadow of the central black holes in the radio galaxy Centaurus A and in our own Milky Way by the Event Horizon Telescope (EHT) opened a new window of research into active galactic nuclei (AGN) as well as into black holes. Soon it became clear that for improved image quality but particularly also temporal resolution, additional telescopes would need to be added to the EHT network of telescopes. The Africa Millimetre Telescope (AMT) will close this gap by being the first telescope in Africa to observe at millimetre wavelengths and, by that, will enable imaging in Sgr A* with the "Eastern" sub-array of the EHT. Beyond those VLBI observations, the AMT will also operate as a single-dish telescope for flux monitoring of AGN and transient science. Observations at millimetre wavelength are strongly influenced by the amount of precipitable water vapour (PWV) in the atmosphere. Here we present the current status of investigations of the PWV content of the atmosphere at the H.E.S.S. site in Namibia.

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