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The African Millimetre Telescope

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The Africa Millimetre Telescope (AMT) will be built on Mount Gamsberg in Namibia, to form part of a worldwide interferometric network of millimetre-wave telescopes to resolve the event horizon of the Galaxy's supermassive blackhole. At a distance of 8kpc and a mass of about 4 million solar masses, the event horizon should subtend an angle of about 10 micro arc seconds from Earth. This is too small to be currently imaged at any wavelength other than using very long baseline interferometry at mm-wavelengths. The AMT will form part of this world-wide network, providing a vital link with telescopes in Hawaii and India, allowing the very longest baseline and thus the highest angular resolution to be achieved. The AMT will use a 15-metre dish which is currently in Chile, and Mount Gamsberg's exceptionally dry weather will allow the galactic centre to be imaged at mm-wavelengths during June-September, as it passes high overhead from Namibia's latitude. In this talk, I will summarise the current status of the AMT project.

Presenter: EVANS, Rhodri (UNAM)

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