

The Antarctic Planet Interferometer
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The Antarctic Planet Interferometer is a concept designed to detect and characterize extrasolar planets by exploiting the unique potential of the best accessible site on Earth for thermal infrared interferometry. The three high-precision interferometric techniques under development for extrasolar planet detection and characterization (astrometry, differential phase and, nulling) all benefit substantially from slow, low-altitude turbulence, low water vapor content, and low temperature found on the Antarctic plateau. At the best of these locations, such as the Concordia base being developed at dome C, an interferometer with two-meter diameter class apertures has the potential to deliver space-like performance.