CASIMIR: the Caltech Airborne Submillimeter Interstellar Medium Investigations Receiver

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CASIMIR, the Caltech Airborne Submillimeter Interstellar Medium Investigations Receiver, is a far infrared and submillimeter heterodyne spectrometer under development for the Stratospheric Observatory For Infrared Astronomy, SOFIA. CASIMIR will carry out observations in the frequency range from 500 GHz up to 1.4 THz, with extremely high spectral resolution, of order 10^6. Capitalizing on recent advances in SIS mixer development, CASIMIR will cover this region of the spectrum with unprecedented sensitivity. CASIMIR is extremely well suited to observe the warm, ~100 K, interstellar medium, particularly water lines, in both Galactic and extragalactic sources.