Abstract

Title: Constraints on the near-infrared emission from Sgr A*

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Observations of the central arcsecond of the Galaxy at near infrared wavelengths reveal a tight stellar cluster, however, no clear point source exactly coincident with the black hole candidate Sgr A* has been detected. Taking advantage of the stability of the point-spread function (PSF) achieved by HST/NICMOS observations, the contaminating emission from the stellar cluster can be eliminated by PSF subtraction techniques. Limits on the maximum flux emanating from a point source coincident with Sgr A* at 1.1, 1.45, 1.6, 1.9, and 2.2 microns based on NICMOS observations are presented. The resulting extinction-corrected fluxes are compared to accretion disk models for the spectrum of Sgr A*.