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# A New Microlensing Event in the Doubly-Imaged Quasar Q0957+561

Laura J. Hainline (1), Christopher W. Morgan (1), J. N. Beach (1), C. S. Kochanek (2), Hugh C. Harris (3), T. Tilleman (3), Ross Fadely (4), Emilio E. Falco (5), T. X. Le (1) ((1) U. S. Naval Academy, (2) Ohio State University, (3) U. S. Naval Observatory, Flagstaff, (4) Haverford College, (5) CfA)

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We present evidence for ultraviolet/optical microlensing in the gravitationally lensed quasar Q0957+561. We combine new measurements from our optical monitoring campaign at the United States Naval Observatory, Flagstaff (USNO) with measurements from the literature and find that the time-delaycorrected r-band flux ratio m\_A - m\_B has increased by ~0.1 magnitudes over a period of five years beginning in the fall of 2005. We apply our Monte Carlo microlensing analysis procedure to the composite light curves, obtaining a measurement of the optical accretion disk size, log {(r\_s/cm)[cos(i)/0.5]^{1/2}} = 16.2<sup>4</sup>+0.5} {-0.6}, that is consistent with the guasar accretion disk size black hole mass relation.

Comments: Replaced with accepted version. Minor adjustments to text but

conclusions unchanged. Data in Table 2 have been updated and

table now includes additional observations

Cosmology and Extragalactic Astrophysics (astro-ph.CO) Subjects:

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