

Abstract Submitted  
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**Velocity Dispersions in Active Galaxies with Low Mass Black Holes** DAVID DECOLIBUS, JASON PINKNEY, Ohio Northern University, EDWARD CACKETT, Wayne State University, KAYHAN GULTIKEN, University of Michigan — We have performed ground-based spectroscopic observations in support of a Hubble Space Telescope program to probe the SED's (spectral energy distributions) of LLAGNs (Low-Luminosity Active Galactic Nuclei). Our targets are six, medium redshift, radio loud galaxies with LLAGN. They were discovered in the Sloan Digital Sky Survey (SDSS) by Greene and Ho (2007a). We wish to improve upon the accuracy of the velocity dispersions produced by the SDSS pipeline. We use the ModSpec Spectrograph on the 2.4 Hiltner telescope at MDM Observatory. Our longslit spectra have a spectral range of about 4650 to 5650 Å, which includes the MgB absorption lines and  $H\beta + [OIII]$  emission lines. We describe the reduction of the CCD spectra and the fitting of absorption and emission lines using the direct pixel fitting technique. We combine multiple exposures to improve S/N ratio, but the uncertainties in velocity dispersion remain  $> 8\%$  because of template mismatch. Our stellar velocity dispersions are largely consistent with the SDSS results and they predict black hole masses around  $10^6 M_{sol}$  for most of our sample.

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