

GeMS/GSAOI near-infrared imaging of $z \sim 0.3$ BL Lacs

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Abstract. Bright quasars at low z have generally been found in massive, evolved host galaxies, consistent with formation at early epochs. However, deep, high resolution, multicolor imaging of some quasar hosts have found morphological evidence of tidal tails and colors indicative of active star formation. These results are consistent with theories of galaxy formation and evolution in which merger processes trigger the activation of the quasar phase, and energetic feedback is essential. Understanding the role the black hole population plays in the galaxy formation process is important, but imaging the host galaxies around bright quasars is difficult because of the contribution of the bright nuclei. Very high resolution, deep imaging is necessary to successfully remove the nuclear component. We made high-resolution near-infrared images of several bright $z \sim 0.3$ BL Lacs with the Gemini Multi-Conjugate Adaptive Optics System (GeMS)/GSAOI in order to study their host galaxies. We will present the results of this imaging with the 1 arcmin AO-corrected field provided by GeMS/GSAOI and compare with available HST imaging available in the archive.

Keywords. galaxies: active, galaxies: properties, methods: near-infrared imaging
