

to the radio jet. This means that: (1) both ionizing radiation and relativistic particles are escaping through holes in the torus perpendicular to the radio jet; and/or (2) the torus is also outflowing, as proposed by recent models of tori as winds from the outer parts of an accretion flow; or (3) the torus is absent in NGC 5929.

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CHROMATIC MICROLENSING IN HE0047-1756 AND SDSS1155+6346

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The gravitational lens effect occurs when the light is deflected in the presence of a gravitational field, generating multiple images or arcs. Microlensing happens when a compact object, in the lens galaxy halo, passes across a quasar lensed image.

We analyzed two double systems: HE0047-1756 and SDSS1155+6346. We used spectra obtained with Magellan/IMACS (2007) and MMT/Blue-Channel (2008). The flux of emission line cores was separated from the continuum flux under them and integrated using DIPSO software. Comparing the magnitude differences in the emission line cores with the magnitude differences in the continuum under the lines (Motta et. al 2012), we found evidence of chromatic microlensing in HE0047-1756 and SDSS1155+6346.

Emission line core fluxes are used to model the systems with *lensmodel*. SIS + γ are the best models in both cases, which are in agreement with literature. SDSS1155+6346 model shows a large shear, due to the presence of MaxBCG J178.81693+63.83446 cluster.

We follow Mediavilla et al. 2011, modeling the accretion disk as a Gaussian intensity profile $I(R) \propto \exp(-R^2/2r_s^2)$, with $r_s(\lambda) \propto \lambda^p$, where r_s is the accretion disk size and p is the power law related to the temperature of the disk $p = 1/\beta$. We estimate the probability of r_s and p using the measured microlensing magnification with linear and logarithmic priors on r_s . We found within 1σ of uncertainty, sizes between 3 and 15 light days and temperature profiles values between 1 and 1.2. These values are

in agreement with the literature and Shakura & Sunyaev (1973) prediction.

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CHARACTERIZING THE ENVIRONMENT OF THE BLAZARS PG1553+113 AND 3C66A FROM GEMINI-GMOS DATA IN THE I' AND G' BANDS

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Blazars are active galactic nuclei (AGNs) which, because of their particular orientation with respect to the observer, are characterized by beamed electromagnetic emission from a relativistic jet. It is thus challenging to detect either continuum or line radiation from the nucleus or from the host galaxy; in many cases this prevents the measurement of a spectroscopic redshift. However, the analysis of their environments may give valuable information, considering that galaxies in the blazar's field could share physical and chemical properties with the host galaxy, besides having a similar redshift. We have thus undertaken a photometric study of the galaxies in the fields of the blazars PG1553+113 and 3C66A, based on g' and i' images taken with the GMOS instrument (multi-object spectrograph and camera) at Gemini North 8m telescope. Our goal is to look for concentrations of galaxies around both blazars in order to have a first knowledge of the general characteristics of their immediate environments.

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FHLS IN SEYFERTS AND LINERS IN THE OPTICAL SPECTRA

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