

## ABSTRACT ONLY

### THE ROLE OF BLACK HOLE MASS, SPIN AND ACCRETION RATE IN AGN

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In this talk we aim to explore how the black hole mass ( $M_{\text{BH}}$ ), spin ( $a_*$ ) and the normalized accretion rate ( $\dot{m}$ ) determine the observed properties of the Accretion Disk (AD) and the Broad Line Region (BLR) of type-I active galactic nuclei (AGN). To this end, we use a sample of 39 unobscured AGN at  $z=1.55$  selected to cover a large range in  $M_{\text{BH}}$  (2.0dex) and Eddington ratio ( $L/L_{\text{Edd}}$ , 2.5dex) observed by using VLT/X-Shooter yielding a rest wavelength range between 1200Å and 9800Å. This wavelength range allows us to map both the AD emission and the most prominent BLR emission lines ( $\text{H}\alpha$ ,  $\text{H}\beta$ ,  $\text{MgII}$  and  $\text{CIV}$ ). Firstly, we show that the optically thick, geometrically thin AD model is successful in reproducing the continuum emission in 37 out of 39 objects in our sample (Capellupo et al 2015 and 2016; Including Mejía-Restrepo as coauthor). Secondly, we examine the implications of ignoring the real AD continuum in  $M_{\text{BH}}$  determinations and discuss about the reliability of single-epoch (SE)  $M_{\text{BH}}$  estimators based on low ionization ( $\text{H}\alpha$ ,  $\text{H}\beta$ , and  $\text{MgII}$ ) and high ionization ( $\text{CIV}$ ) broad emission lines (Mejía-Restrepo et al 2016). We finally explain the role of  $M_{\text{BH}}$ ,  $a_*$  and  $\dot{m}$  in shaping the BLR emission including the analysis of emission line ratios, FWHMs and emission line shifts of the BLR emission lines mapped by our sample (Mejía-Restrepo et al 2016; in preparation). I apply for an oral contribution.

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