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PROBING BLR KINEMATICS VIA DOUBLE-PEAKED Ca II

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Double-peaked emission lines are observed in a small fraction of active galactic nuclei (AGN) and offer a means to determine key properties of the line-emitting region, known as the broad-line region (BLR). Until now, studies of double-peaked emitters (DPEs) have focused almost exclusively on the Balmer lines Hβ and Hα, while investigations of double-peaked lines in the UV or near-infrared remain scarce. Notably, we recently reported – for the first time – broad double-peaked emission profiles in the near-infrared Ca II triplet for individual sources, namely NGC 1566 and NGC 4593. These detections represent the first of their kind to date. The profiles enabled us

to link the kinematics of the Ca II-emitting phase of the BLR to those of a rotating relativistic disk, largely unaffected by internal turbulence, thus allowing a more direct interpretation of the underlying BLR dynamics. In this talk, we summarize our recent findings and discuss the potential of Ca II emission profiles as a powerful diagnostic tool for probing the kinematics of the BLR.