

A MULTIWAVELENGTH HST/SWIFT CAMPAIGN OF MRK 279: MAPPING THE ACCRETION DISK AND BROAD-LINE REGION

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The variability of active galactic nuclei (AGN) is one of their most distinctive features and has been successfully used over the past four decades to infer fundamental properties of their central engines. In particular, reverberation mapping (RM) – which traces the propagation of a perturbing signal as it reflects off, or is reprocessed by, surrounding material – has proven to be a powerful tool for probing the structure of the accretion disk (AD) and broad-line region (BLR) in AGN. Although RM is now

an established technique, the highest-quality campaigns – that is, those combining multi-wavelength, high-cadence observations from both space- and ground-based telescopes – remain exceptionally rare. Among the best-studied targets are NGC 5548 and Mrk 817, which were observed as part of the STORM campaigns. Here, we present initial results from a 50-day HST/STIS monitoring campaign of the AGN Mrk 279, conducted with daily cadence and spanning the UV to near-infrared regime. These observations are complemented by contemporaneous *Swift* monitoring with XRT and UVOT. In this talk, we focus in particular on the structure and ionization response of the BLR in Mrk 279, investigating how multiple emission-line species react to variations in the ionizing continuum.