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Photometric Reverberation Mapping of Mrk 926 CARLA JUNE CARROLL, MICHAEL JONER, Brigham Young University — We have observed over 25 nights of the active galactic nuclei (AGN) Mrk 926 using the 0.9 m telescope from Brigham Young University's West Mountain Observatory (WMO) to determine the black hole mass through broad band photometric reverberation mapping (RM). Mrk 926 was chosen due to its strong emission lines and strong variability. Observations in the V and R band filters provided access to time variations in H β and H α (respectively) as well as continuum. The I band filter provided exclusive continuum. Using similar techniques, Edri et. al. (2012) determined the black hole mass for the low-luminosity AGN NGC 4395, using continuous monitoring over several nights. We observed several more nights without needing continuous monitoring, allowing us to propose a refined black hole mass estimate from the time lag in H α for Mrk 926.

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