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Progress Report

BLACK HOLE MASS ESTIMATES USING GRAVITATIONAL REDSHIFT OF BROAD EMISSION LINES IN ACTIVE GALACTIC NUCLEI

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Here we present results of black hole mass estimates using gravitational redshift for a sample of 285 type 1 Active Galactic Nuclei (AGN) selected from the Sloan Digital Sky Survey database. The shifts are measured as a difference between the centroids at 5% and 95% of the H_β and Mg II broad line intensities. Obtained masses have been compared with ones estimated from wide accepted virial method (using widths of H_β and Mg II broad lines). We discuss the possibility to use the gravitational redshift for black hole mass estimations in AGN and validity of virialization assumption in the AGN broad lines.