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POLARIMETRIC REVERBERATION MAPPING OF AGNs IN MEDIUM-BAND FILTERS

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The classical reverberation method in type 1 AGNs makes it possible to measure the distance to rotating gas clouds around a supermassive black hole by estimating the time delay between the radiation flux in the broad emission line and the continuum. The extension of the classical method to polarized radiation in medium-band filters makes it possible to measure the distance to the equatorial scattering region, which, on the one hand, is difficult to measure by other methods, and, on the other hand, provides a more complete information about the unresolvable AGN central parsec and is useful for spectropolarimetric measurements of the masses of central SMBHs. We describe the observation technique and present the results of polarimetric monitoring of some studied AGNs.