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OSCILLATION PATTERNS IN AGN LIGHT CURVES

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We formulate and test two types of algorithms: one for echo mapping theemission-line regions near active galactic nuclei and second for detection of oscillatory signals in the light curves of these objects. The echo mapping algorithm can help in detection of binary supermassive black holes on elliptical orbits with elliptical broad line regions. The oscillation detection algorithm successfully classified type 1 objects according to characterstics of oscillatory patterns in their light curves.