Quasar Variability

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It is well known that the emission of blazars is variable at all wavelength. However, the study of the origin of this variability is not a easy task, since there are delays between the different wavelengths, that can be only a few days, between optical and X-rays, or months between radio and γ -rays. We need a well sampled time coverage of years to search for correlations between them. Moreover, the timescale of variability is also different between the wavelengths, being hours at γ -rays and weeks at radio wavelengths. The main explanation to this behavior is that it is due opacity effects, where a jet component optically thick expands until becames optically thin at a given frequency, when it occurs a maximum at this wavelength. In this talk I will present the results of 4 years of monitoring at the Itapetinga Radio Observatory, focus on the sources 3C273, 3C279 and PKS 1510-089.

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