

Periodical Instabilities in the Blackhole Candidate GX339-4 Accretion Disk

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Abstract. GX339-4, a black hole candidate, has been monitored since more than 30 years by X and gamma-ray spectrometers on board a dozen of satellites. One of the main characteristics of this source is its bimodal behaviour (high and low states). These states, apparently driven by accretion of matter from a companion onto a compact object, appear to be periodic, with a 14.5 month repetitivity, and an approximative 4 month duration. We discuss, in this paper, on periodic instabilities in the accretion disk surrounding GX339-4 to explain this bimodal behaviour.