Talk at Splinter Meeting

Splinter L

Analysis of the four brightest X-ray flares from Sgr A*

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The brightest flares, which have been observed from Sgr A* in the X-ray domain, all show an asymmetric shape consisting of a combination of two peaks. Coincidentally, such asymmetric shapes also arise in simulations of an orbiting hotspot model, due to therinfluence of the two general relativistic effects which are predominantly responsible for the modulation of the intensity in this particular model. In this talk I investigate if the brightest X-ray flares are in accordance with these simulations. It is demonstrated, that the hotspot model gives constraints on the mass of the super-massive black hole at the position of Sgr A* which are in agreement with estimates of from stellar orbits.