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Hot News from the Milky Way's Central Black Hole¹

DARYL HAGGARD, Northwestern University/CIERA

The recent discovery of a dense, cold cloud (dubbed “G2”) approaching the supermassive black hole at our Galactic Center (Sgr A*) offers an unprecedented opportunity to test models of black hole accretion and its associated feedback. G2's orbit is eccentric and the cloud already shows signs of tidal disruption by the black hole. High-energy emission from the Sgr A*/G2 encounter will likely rise toward pericenter (Spring 2014) and continue over the next several years as the material circularizes. This encounter may also enhance Sgr A*'s flare activity across the electromagnetic spectrum. I will present intensive multiwavelength campaigns (X-ray through radio) aimed at studying the radiation properties of Sgr A* as G2 breaks up and feeds the accretion flow, to constrain the rates and emission mechanisms of faint X-ray flares, and to detect G2 itself as it is shocked and heated.

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