A New Way to Study Massive Black Holes in Galaxies

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Abstract

We point out that the tidal disruption of a giant may leave a luminous ($10^{35} - 10^{39}$ erg/s), hot ($10 - 100$ eV) stellar core. The "supersoft" source (SSS) detected by *Chandra* at the center of M31 (Garcia *et al.* 2000) may be such a core; whether or not it is, the observations have shown that such a core is detectable, even in the center of a galaxy. We therefore explore the range of expected observational signatures, and how they may be used to (1) test the hypothesis that the M31 source is a remnant of tidal stripping, and (2) discover evidence of black holess and disruption events in other galaxies.

CATEGORY: NORMAL GALAXIES