

BLACK HOLES IN DENSE STAR CLUSTERS
Aspen Center for Physics
2015 Aspen Winter Conference January 17-22, 2015

TITLE: Galactic Center Source G1 and other G2-like Sources

SPEAKER: Breann Sitarski (UCLA)

We present new measurements of the Galactic Center source G1, an extremely red source was discovered in 2004 to be within 0.20 arcsec of the black hole. This source has moved significantly on the plane of the sky and, when modeled as Keplerian orbital motion, it appears to have a very eccentric orbit and has recently passed through periaapse. Our observations and orbital fit suggest that G1 and G2 lie in a similar orbital plane but are at a different phase within that plane. Additionally, the survival of G1 through periaapse passage implies that these red objects are stellar in nature.