



ASTROPHYSICS SEMINAR

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“Feedback Large and Small: Multi-Epoch Constraints on AGN Outflows”

Monday, October 15, 2012

Refreshments at 3:30pm in CAS 500

Talk begins at 4:00pm in CAS 502

Abstract:

A supermassive black hole (SMBH) resides at the heart of every massive galaxy, including our Milky Way. These monsters, agglomerations of mass so dense that even light cannot escape their gravitational pull, have a profound impact on the formation and structure of their host galaxies, despite being packed into structures smaller than our own Solar System. The link between massive galaxies and their central black holes is vital to our understanding of galaxy formation and evolution. So-called "feedback" from the SMBH, wherein jets, winds, and radiation disrupt gas on galactic scales, provides one possible connection between phenomena on these enormously different size scales. I will discuss SMBH feedback in the form of winds and jets, focusing on two extrema: spectroscopic variability in broad absorption line quasars, which probe the high-velocity gas ejected by luminous accreting black holes; and a recently-detected outflow from the low-luminosity AGN at our Galactic Center, Sgr A* (plus prospects for more fireworks to come!).