



PHYSICS AND ASTRONOMY SEMINAR

Dr. Rachel Mason

Gemini Observatory, Hawaii

“The Nuclear Regions of Local Active Galaxies”

Abstract

The smallscale (< few tens of pc) characteristics of active galaxies form an important part of our picture of the growth of black holes and their effects on their host galaxies. In this talk I will briefly review current ideas about one of the main components of an AGN, the dusty torus. I will discuss its possible roles in both inflow to and outflow from the nucleus, and present a search for the H₃⁺ molecular ion that could be a unique tracer of the kinematics of the material that makes up the bulk of the torus. I will also talk about AGN which aren't supposed to have a torus: verylowluminosity objects in which the accretion flow and its surroundings are expected to be very different from those of "conventional" AGN. We have addressed these issues using high-resolution IR imaging of local LINERs and Seyferts, with results that pose some challenges for existing models of these objects.

Tuesday April 22, 2014
3:00 p.m.
Elliott Building
Room 162