



PHYSICS AND ASTRONOMY SEMINAR

Dr. Rachel Mason

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“The Nuclear Regions of Local Active Galaxies”

Abstract

The small-scale ($< \text{few tens of pc}$) 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: very low-luminosity 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