

THE DUST DICHOTOMY IN EARLY-TYPE GALAXIES

Prof. Paul Martini
The Ohio State University

Tuesday, April 10, 2012
12:30 P.M. in NSH 184

A surprisingly large number of early-type galaxies are observed to have circumnuclear dust, yet the origin of this dust remains a mystery. Two origins have been proposed to explain the dust: creation in winds by cool, evolved stars and the accretion of gas-rich satellites. I will present multi-wavelength observations of a large sample of nearby, early-type galaxies that illustrate a pronounced dust dichotomy between dusty, early-type galaxies classified as AGN and dust-poor, inactive galaxies. Dust model fits to this well-matched and representative sample indicate that the typical dust mass is consistent with satellite accretion, yet this explanation appears to require a surprisingly high merger rate.

Astrophysics
Seminar

All interested
persons are
cordially
invited to
attend.