

SEARCHING FOR AGN SIGNATURES IN MID-IR SPECTRA

O. Laurent¹, I.F. Mirabel², V. Charmandaris³, D. Lutz¹, R. Genzel¹

¹*Max-Planck-Institut für extraterrestrische Physik, 85740 Garching, Germany*

²*CEA/DSM/DAPNIA, Service d'Astrophysique, F-91191 Gif-sur-Yvette, France*

³*Cornell University, 106 Space Sciences Bldg, Ithaca, NY 14853, USA*

Infrared observations are essential in the understanding of the major powering sources in the central regions of galaxies which are often enshrouded by dust. In particular, distinct mid-infrared dust emission features offer us the possibility to distinguish active galactic nuclei (AGNs) from starbursts. I will describe the infrared properties of prototypical starburst (M82) and active galaxies (NGC1068). I will present and compare several mid-infrared diagnostic methods based on PAHs, emission lines, and continuum of galaxies observed with ISO. The consequences of these AGN/starburst criteria on ultraluminous infrared galaxies will be discussed as well as the future observation capabilities with SIRTf and FIRST in the light of ISO results.