



SEMINAIRE régulier du Service d'Astrophysique

Active Galactic Nuclei in the infrared: identification, energetic and properties of the obscuring matter

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Jeudi 27 septembre 2007

11h00

Using multi-wavelength data from the largest Spitzer legacy project, SWIRE, the properties (spectral energy distributions, redshifts and luminosities) of Active Galactic Nuclei (AGN) are investigated. The AGN content among infrared populations is estimated and compared with previous findings and models. We show that a mid-infrared selection can efficiently find the long-sought obscured and luminous AGNs at high redshifts. We present a remarkable sample of extremely luminous and heavily obscured AGNs at $z \sim 2$ selected in the mid-infrared. Their spectral energy distributions and infrared spectra are modeled with clumpy torus models, and the properties of their obscuring matter are constrained. Large far-infrared luminosities, above the predictions of the torus models, are measured in a sub-set of these obscured AGNs, implying extreme star formation rates if powered by a starburst. The implications of our results on current AGN models and predictions for future Herschel observations of obscured and luminous AGNs are discussed.



Un café sera servi 15 minutes avant le séminaire

Ce séminaire aura lieu au CEA Saclay – Orme des Merisiers – bâtiment 709, Salle 220.