ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΡΗΤΗΣ

ΤΜΗΜΑ ΦΥΣΙΚΗΣ

ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday 11 October 2007
17:00-18:00

3rd Floor Seminar Room

"Infrared Properties of interacting galaxies: from Spirals to ULIRGs"

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ABSTRACT:

Interactions between galaxies lead to massive star formation over extended spatial scales where the properties of interstellar radiation field, gas and dust content vary substantially. Interactions were more frequent in the past and it is the principal mechanism of galaxy evolution, often leading to the formation of ultraluminous infrared galaxies (ULIRGs). While rare in the local Universe, ULIRGs play a dominant role in producing the far-infrared background as well as the star formation energy density at high redshifts. I will review the mid infrared properties of interacting galaxies as these were revealed using observations from the Spitzer Space Telescope. An emphasis will be given to the use of variations in the infrared spectral energy distributions as a tracer of the physical mechanism dominating the energy production in these systems.

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