



Università degli Studi di Perugia
DIPARTIMENTO DI FISICA
Dottorato di Ricerca in Fisica
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AVVISO DI SEMINARIO
Giovedì 19 Marzo
ore 15:30 in Aula Riunioni

Prof. Thibaut Le Bertre
Observatoire de Paris

*“The Return of Mass from Evolved
Stars to the Interstellar Medium.
Quantitative Estimates from
Radio-astronomical Observations.”*

Abstract:

Mass-loss from AGB stars is a highly variable process which renders the determination of its rate and of its balance as a function of the stars' evolutionary stage a difficult task. Several diagnostic tools can be considered. The most commonly used are the rotational lines of molecules, like CO or SiO, and the emission by dust at infrared wavelengths. However they are sensitive to only a part of the material, sometimes in limited regions of the circumstellar shells. Other tracers, which may be very useful like lines of HI and H₂, should also be considered in order to get a more representative picture of these shells which extend out to the Interstellar Medium. I will illustrate how observing AGB stars in the HI line at 21 cm allows to probe the external parts of circumstellar shells that are dominated by the interaction with the ambient medium. I will discuss also the potential of infrared spectro-photometric surveys for estimating the mass loss from populations of AGBs.

Oltre ai Dottorandi, l'invito è cordialmente esteso a tutti gli interessati.

IL COORDINATORE
Prof. Maurizio Busso