Séminaire organisé par

AIM &Le service d'Astrophysique
CEA/DSM/Irfu

COLD GAS AS A PROBE OF GALAXY EVOLUTION

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Observations of molecular gas in galaxies are now starting to transition from a "discovery" to a "survey" mode, since it is now possible to directly investigate the gas contents of large samples of normal galaxies, both at low and high redshift. Since cold gas is not only a direct tracer of the instantaneous potential of a galaxy to form stars, but also a much more sensitive probe of the mechanisms that affect the star formation process and the growth of galaxies, these surveys allow us to assess the relative importance of different channels for galaxy evolution. In this talk, I will review results from the COLD GASS survey, which has allowed us for the first time to quantify the scaling relations of gas contents with galaxy structural properties and understand the distribution of galaxies in the SFR-mass plane, but also to assess the relative importance of galaxy interactions, bar instabilities, stellar bulges and AGN in setting the global star formation efficiency of galaxies.

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6 décembre 2012

11h00 Salle Galilée bât 713 C - Orme des Merisiers

Un café sera servi 15 mn avant le séminaire

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