



Séminaire organisé par

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



THE LYMAN ALPHA COSMIC LINE

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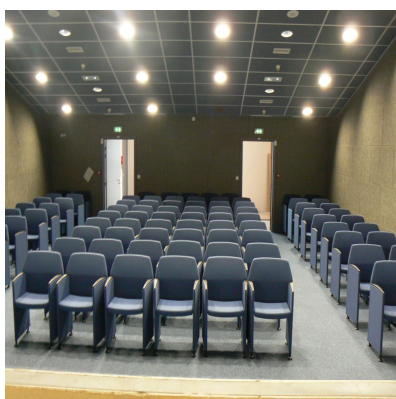
The Lyman alpha is a cosmic recombination line in the sense that it occurs from the most atomic abundant element of the universe hence is potentially very bright. Therefore it allows the discovery and study of distant galaxies at redshift as large a 8 and potentially 10.

However its transfer in the ISM is complex due to the resonant nature of this line that interplays with the dust, the HI and is affected by the many parameters of the star formation event and that of the host galaxy. Our studies of local galaxies, performed with the HST, show this complexity. One of the major results of our HST imaging studies has been to reveal large extended Lyman alpha haloes much larger than that of H alpha, confirming the role of resonant scattering processes in the transfer of the Lyman photons. These studies have allowed us to consider the evolution of the Lyman alpha escape as a function of the cosmic time. We find evolution. We also ask the question whether dwarf galaxies are able to re-ionize the Universe at z around 6.

25 avril 2013

ATTENTION LIEU INHABITUEL

11h00 Salle 003 bât 709 - Orme des Merisiers



Un café sera servi 15 mn avant le séminaire

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