

**ABS- AND EM-LINE PROFILES OF DLA SELECTED GALAXIES:
THE SIGNATURE OF DARK MATTER HALO PROFILES**

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Damped Lyman- α Absorbers (DLAs) are absorbing clouds with high HI column density and are typically observed at redshifts $z > 1.8$ (the atmospheric cut-off for Ly α). DLAs have been known for almost half a century, and they have been (and still are) our most important tool to study the build-up of metallicity from the highest redshifts to now. It was always assumed that DLAs were associated to galaxies in some way, but the task of finding those galaxies was extremely challenging. The newest generation of instrumentation on the ESO-VLT, as well as ALMA, has changed this and within the past decade we have finally been able to identify samples of DLA host galaxies, thus providing both emission line spectra of the galaxies and absorption line spectra through their Circum Galactic Medium. The DLA host galaxies follow scaling relations akin to those known locally, allowing us to study the evolution of those scaling relations from redshifts 5-6 to the present.

In this talk I will review the state of the field, with special emphasis on scaling relations related to the line-profiles of the DLA hosts seen in both absorption and emission.