

**The VIMOS Ultra Deep Survey: $\text{Ly}\alpha$ Emission and Stellar Populations
of Star-Forming Galaxies at $2 < z < 6$**

Nimish Hathi¹, Olivier Le Fèvre¹

¹ *LAM, France*

Abstract

A comprehensive study of star-forming galaxies (SFGs) at $z \sim 2 - 6$ using ground-based spectroscopy and multi-wavelength photometry is vital for understanding physical processes that govern star formation and galaxy assembly at these cosmic epochs. Until now, such studies were limited by small samples because of the lack of large area, deep spectroscopic observations at high redshifts. The extensive ground-based spectroscopy campaign from the VIMOS Ultra-Deep Survey (VUDS), and the deep multi-wavelength photometry in three very well observed extragalactic fields (ECDFS, COSMOS, VVDS), allow us to investigate physical properties of a large sample (~ 8000 galaxies) of spectroscopically confirmed SFGs at $z \sim 2 - 6$. We will present results from our spectro-photometric studies of $\text{Ly}\alpha$ emitters and non- $\text{Ly}\alpha$ emitters at $2 < z < 6$, and infer possible correlations between their best-fit SED parameters and rest-frame UV spectral features.