

## THE VIRMOS PROJECT

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Large and deep spectroscopic samples of galaxies are essential to study galaxies and large scale structure evolution out to look-back times  $\sim 10\%$  the current age of the universe. Keeping this scientific and observational goal in mind, we designed and are presently building two wide-field imaging spectrographs to be installed at the Nasmyth foci of the ESO-VLT Unit Telescopes 3 and 4.

VMOS is a multi-object spectrograph with a field of view of over  $200 \text{ arcmin}^2$ , and a multiplexing gain between 200 and 840 (depending on the spectral resolution), working in the wavelength range  $370 \text{ nm} \leq \lambda \leq 1000 \text{ nm}$ . It will become operational in the year 2000.

NIRMOS is its near-IR counterpart, working in the wavelength range  $800 \text{ nm} \leq \lambda \leq 1800 \text{ nm}$  (with imaging capabilities extended into the K band). It has a field of view of  $192 \text{ arcmin}^2$  and a multiplexing gain of 190 at  $R = 2500$ . It will become operational one year after VMOS.

We show that with these two instruments it will be possible to measure the redshifts of  $\sim 10^5$   $1 \leq z \leq 24$  galaxies, of which a sizable fraction will be at  $z > 1$ , in a reasonable amount of telescope time.