

## **BATMAN: MOS spectroscopy on demand.**

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### **Abstract**

TNG is hosting a novelty project for a real-time, on-demand MOS masks based on MOEMS programmable slits. We are developing a 2048x1080 Digital-Micromirror-Device-based (DMD) MOS instrument to be mounted on the Galileo telescope and called BATMAN. It is a two-arm instrument designed for providing in parallel imaging and spectroscopic capabilities. With a field of view of 6.8 arcmin x 3.6 arcmin and a plate scale of 0.2 arcsec per micromirror, this astronomical setup can be used to investigate the formation and evolution of galaxies. The wavelength range is in the visible and the spectral resolution is  $R=560$  for 1 arcsec object and the two arms will have 2k x 4k CCD detectors. We plan to have first light before end of 2015.