

WST - the Wide-field Spectroscopic Telescope: surveying the Universe in the 2040's and beyond



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Spectroscopic analysis of novel HI detections

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The upcoming surveys of the SKA will completely change our view of the distribution of atomic neutral hydrogen (HI) in galaxies and their environment. Out to $z \sim 1$, SKA will provide HI masses of half a million galaxies, spanning from gas-rich low-surface brightness sources to massive early type sources and Active Galactic Nuclei. Most of these sources will not have spectroscopic information, thus leaving an incomplete characterisation of the ISM and stellar properties of these galaxies. In this talk, I will show how the WST because of its wide field of view and high spectral resolution will enable us to properly characterise the novel SKA-HI sources and also investigate the properties of the gas-poor (HI-non detections) living in the same environments.

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