The II National Workshop of SKA science and technology



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ASKAP HI Imaging of a nearby spiral galaxy - 15'

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The Australia Square Kilometre Array Pathfinder (ASKAP) is a new radio interferometer that is pioneering revolutionary Phased Array Feed (PAF) receivers, which are under consideration for future SKA instrumentation. I will give an update on ASKAP status, rollout and commissioning, and present the first results from WALLABY, the main extragalactic ASKAP HI survey that has been using an ASKAP sub-array for early science. We have produced the highest resolution HI images of the nearby, gas-rich, spiral galaxy IC 5201 that has also revealed 3 gas-rich dwarf satellite galaxies. An additional 5 galaxies and 2 tidal features are detected in the same HI images due to the instantaneous wide-filed imaging capabilities of ASKAP. I will discuss the physical properties of these systems, focusing on the ratios of available HI gas, star formation rate and stellar mass in order to describe the galaxies and their environments.

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