



Royal
Astronomical
Society

Dr Steven Cunnington – Early Career Award (A)

Dr Steven Cunnington is one of the leaders in the 21cm Intensity Mapping collaboration MeerKLASS, which uses the single-dish mode of the MeerKAT array (a SKA pre-cursor) to survey the cosmic web. He is the lead author of the first 21cm cross-correlation detection paper from the MeerKLASS collaboration, having led the analysis from map to power spectrum measurement. This paper marked the first reported 21cm cross-correlation detection with a multi-dish telescope array.

Dr Cunnington has made significant preparatory contributions to the cosmology science case of the international SKA Observatory project and is the main developer and leader of the MeerKLASS intensity mapping power spectrum analysis pipeline (MeerPower). This pipeline will form the core of the future SKA-Mid single dish survey analysis pipeline for 21cm intensity mapping and is currently also part of a Demonstrator Case for the UK-SRC network.

Dr Cunnington dedicates large amounts of time to outreach and public engagement to make STEM subjects more accessible to children from lower-income families. He is also a highly dedicated mentor to students, helping and supporting students and collaborators alike.