



Royal
Astronomical
Society

The 2023 Winton Award (A) is awarded to Dr Alexandra Amon

Dr. Alexandra Amon is a very talented young scientist who is rapidly emerging as one of the new leaders in observational cosmology. Dr. Amon's thesis work included carrying out much of the analysis for the ESO Kilo-Degree Survey and contributing to many aspects of the 2dFLenS redshift survey. This work included leadership of two science projects: a comparison of shear measurements from i-band and r-band imaging, and a test of General Relativity. Dr. Amon moved to the US to work on the Dark Energy Survey Year-3 analysis and quickly rose to leadership roles. In particular, Dr. Amon led the cosmic shear analysis, a highly technical endeavour in which the distortion of galaxy shapes provides a direct way to study the distribution of matter in the universe. This paper robustly confirmed earlier hints of inconsistency with the cosmological model. She also contributed significantly to optimizing photometric redshift determination, and to determining the impact of point-spread function calibrations on the shear measurements. This work clearly established Dr. Amon as a leader in the field. She is now back in the UK and has taken on leadership of the final weak lensing cosmological analysis of the DES Year-6, a major responsibility only 4 years out of a PhD.

For her leadership, mentorship, and wide-ranging scientific contributions Dr. Alexandra Amon is awarded the 2023 RAS Winton Award