

Ofer Lahav: 2020 George Darwin Lecture

Professor Ofer Lahav has held the Perren Chair of Astronomy at University College London since 2004. At UCL, Professor Lahav has built a world class group in cosmology with particular emphasis on large-scale galaxy surveys. Professor Lahav has a distinguished record of research in cosmology.

His early research in Cambridge concentrated on the local peculiar velocity field and the cosmological constant. He has had a long standing interest in novel statistical techniques and was an early pioneer in applying 'machine learning' techniques to problems in astronomy.

For example, Professor Lahav applied neural networks to the classification of galaxy morphologies and spectra. He has used machine learning techniques to classify spectra in the 2 degree field redshift survey and to estimate photometric redshifts. Ofer Lahav has been a leader of the science programme in the Dark Energy Survey (DES) for which UCL provided the optical corrector.

DES has been a highly influential project, producing a diverse range of science extending from studies of the Solar System and the Milky Way, to weak gravitational lensing, follow-ups of gravitational wave events, distant supernovae and quasars. His continued leadership places the UK in a strong position to exploit future projects such as the Large Synoptic Survey Telescope, the Dark Energy Spectroscopic Instrument and ESA's Euclid space mission.

Short citation

Professor Ofer Lahav is awarded the 2020 George Darwin Lecture in recognition of his influential research on cosmology and particularly for his leadership in the Dark Energy Survey.