

## **Citation for the 2018 RAS 'A' Eddington Medal: Professor Claudia Maraston**

The 2018 Eddington Medal in Astronomy is awarded to Professor Claudia Maraston.

Professor Claudia Maraston is a world leader in modelling of the spectral energy distribution of unresolved stellar populations. In recent years such models have provided powerful tools for understanding galaxy evolution from high redshift to the present. Professor Maraston has revolutionised such models through a comprehensive understanding of stellar evolution.

A landmark single-author paper by Professor Maraston, published in 2005, provides the first evaluation of how the input from stellar evolution theory impacts the predicted integrated spectra of galaxies. New features in the models, particular the inclusion of the evolved stellar phases (called the Thermally-Pulsating Asymptotic Giant Branch) resulted in lower ages than earlier models, a feature that helped to reconcile stellar population analysis of galaxy ages with the hierarchical galaxy formation scenario. The new models constructed by Professor Maraston and utilised and expanded by her and others in subsequent work have generated huge interest and wide application. Her insights have pushed the details of stellar evolution into the realm of cosmology.

For these reasons, Professor Maraston is awarded the Eddington Medal for Astronomy.