



Royal
Astronomical
Society

The 2024 George Darwin Lectureship is awarded to Professor Chiaki Kobayashi

Professor Chiaki Kobayashi is an internationally recognised leader in the field of chemical evolution of galaxies, and a pioneer in the study of the origin of the elements – a subject which bridges nuclear physics and astrophysics.

Her best-known works on the topic include the “astronomer’s version” of the Periodic Table which takes the well-known version of the Periodic Table and enriches it to provide for each element the cosmic abundance as a function of age of the Universe, listing each of the processes that led to their creation.

Another recent highlight is the prediction of magnetorotational hypernovae being an additional site for the rapid neutron capture process (in addition to neutron star mergers), which has recently been confirmed by the discovery of a star with the expected chemical signature.

This work has a direct impact on the predicted number of neutron star mergers that can be detected through their gravitational waves.

Professor Kobayashi is also a highly-experienced science communicator, with her work featuring in several news articles, and TV and radio programs across the globe.

For these reasons Professor Kobayashi is awarded the George Darwin Lecture.