



### **Short Biography**

Lisa Jennifer Kewley is a Professor and Australian Research Council Laureate Fellow at the Australian National University.

Prof. Kewley obtained her PhD in 2002 from the Australian National University on the connection between star-formation and supermassive black holes in infrared galaxies. Prof. Kewley received a CfA fellowship Harvard-Smithsonian Center for Astrophysics where she worked on the star formation and chemical properties of nearby galaxies. In 2004, Prof. Kewley received a NASA Hubble Fellowship which she took to the University of Hawaii. There, she used the Keck and Subaru telescopes on Mauna Kea to understand the star formation and chemical abundances in galaxies in the distant universe.

Prof Kewley is an established world leader in the theoretical modelling and observation of star-forming and active galaxies. Her seminal contributions include understanding the gas physics in star-forming galaxies, understanding galaxies containing actively accreting supermassive black holes, and tracing the star-formation and oxygen history of galaxies over the past 12 billion years. Prof. Kewley's most recent research combines stellar evolution and photoionization models with 3D integral field spectroscopy to understand the physical processes that transform galaxies.

Prof. Kewley's research has been recognised world-wide. She received the 2006 American Astronomical Society Annie Jump Cannon Award, and the 2008 American Astronomical Society Newton Lacy Pierce Prize. She received the National Science Foundation's most prestigious awards in support of junior faculty, the NSF Early CAREER Award (2008). She was named one of Astronomy Magazine's top 10 rising stars of Astronomy in 2009 and appeared on national documentaries for the Discovery Channel and the National Geographic Channel. In 2011, Prof. Kewley returned to Australia as Professor in the Research School for Astronomy and Astrophysics at the Australian National University. She received a 2011 Australian Research Council Future Fellowship for mid-career researchers. In 2014, Prof. Kewley was named one of the Australian Financial Review and Westpac 100 Women of Influence for innovation in her ambitious research program on the star formation and chemical history of the Universe. Prof. Kewley was honoured to give 2014 Royal Astronomical Society and University of Cambridge Eddington Prize Lecture.

In 2014, Prof. Kewley was elected Fellow of the Australian Academy of Science "for her fundamental advances in understanding of the history of the universe, particularly star and galaxy formation", and in 2015, Prof. Kewley was awarded an ARC Laureate Fellowship, Australia's top fellowship to support excellence in research. In 2016, Prof. Kewley gave the Harvard-Smithsonian Centre for Astrophysics Sackler Lecture, which honours senior scientists for a career of distinguished scientific accomplishments, and she received the Taiwan Delta Lectureship Award which "recognizes scholars under the age of 45 who have made outstanding contributions in the field of astronomy or astrophysics".

Prof. Kewley is currently implementing her scientific vision through her Australian Research Council Centre of Excellence in All-Sky Astrophysics in 3D (CAASTRO-3D). CAASTRO-3D is a large distributed research centre of ~200 researchers covering six Australian universities, three partner observatories and seven international partner institutions. The CAASTRO-3D research program combines Australia's radio and optical ground-based telescopes with international 8-10m telescopes and world-wide super-computing facilities to understand the formation and evolution of matter, ionizing radiation, and chemical elements in the Universe.