

# Lodge Talks Program

10:30am--Brad Tucker: Space Race 2.0

11:00am--Sven Buder - *Unravelling the Milky Way's history through starlight with the GALAH Survey*

The history of our Milky Way galaxy is written in starlight. Join me for a colourful review of how our team of Galactic archaeologists uncovers the key moments of our own Galaxy with the Anglo-Australian Telescope.

11:30am--Peter Swanton - *"Impacts of Light pollution on Indigenous Knowledge Systems"*.

The scientific importance of Indigenous star knowledges, and what we need to do in order to preserve these knowledges on Country, as well as in the night sky.

12:00pm--Neco Kriel: *Magnetic fields: the quiet architects of galaxies*

13:30pm--Stuart Wyithe - *Finite Speed of Light & Archaeology of the Universe*

14:00pm--Chris Lidman - TBA

14:30pm--Katie Auchettl - 2023 BOK LECTURE

A stellar crime scene: piecing together the life and death of stars

Stars are the powerhouses for forging elements. During their lives they can forge elements all the way up to Iron. However, like us, stars also don't live forever and when they reach the end of their lives, they don't go quietly, but rather explode like a firework in something called a supernova explosion which enriches the universe with these and even heavier elements. However, one of the most uncertain aspects related to our understanding of the end points of a star's life is the link between the properties of the star during its life and the type of supernova explosion that it will undergo. In this talk, I will highlight how we piece together the leftover pieces of these stars using telescopes both on Earth and in space in an attempt to further our understanding of the life and death of stars.