

# Lodge Talks Program

## **10:30am--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.

## **11:00am--Sowmya Krishna - Artificial Star**

Stars are one of the beauties of the night sky. What if stars are not visible in the sky? Can we create one?

## **11:30am--Josephine Munro - Removing the Twinkle from Stars:Bad for Songwriters but Good for Astronomers**

One of the biggest problems facing ground-based astronomy is the scintillation (or twinkling) of stars. Different pockets of temperature and wind velocities in the atmosphere cause scintillation, which degrades the image of a star or galaxy. But a clever solution is used to recover the image using a deformable mirror.

## **12:00pm--Michelle Cluver - Science from the Other Web: Creating a 3D Map of our Local Universe**

One of the most powerful and beautiful manifestations of the fundamental role of gravity in our Universe is the Cosmic Web. How does this web tell us how mass and structure have been assembled in the Universe? How is it allowing us to test nature versus nurture on the largest scales? Come along and find out how the AAT has been a critical pathfinder in our quest to map the local universe and how Australia continues to lead the way in this space

## **13:30pm--Fred Watson - Satellite Constellations**

## **14:00pm--Matthew Colless - A Spectacular New View of the Universe**

The first results from the James Webb Space Telescope are now in, and they are spectacular! We are seeing galaxies forming just after the Big Bang and the atmospheres of planets orbiting other stars. Come and see the marvellous pictures from the most powerful new telescope in space!

## **14:30pm--Susan Scott - 2022 BOK LECTURE**

**Surfing gravitational waves to probe the dark side of the Universe**