

Millisecond Radio Pulsars: Nature's clocks in the sky

Monday 16 October 2023 09:00 (1 hour)

In this talk, I will talk about the many different manifestations of neutron stars in our galaxy and the greater cosmos that emit everything from gamma rays to radio waves in either regular pulses or once-off "Fast Radio Bursts".

Normal pulsars die after typically just a few Myr, but some are fortunate to be recycled by material fed to them from a stellar companion. These recycled pulsars offer some amazing scientific opportunities, for both tests of General Relativity and the detection of a stochastic background of gravitational waves from supermassive black holes using an array of millisecond pulsars, nature's most accurate naturally occurring clocks.

Author: BAILES, Matthew

Presenter: BAILES, Matthew

Session Classification: Smoking Ceremony and Opening Plenary Session

Track Classification: Precision Tests on Fundamental Physics