

Millisecond Radio Pulsars: Nature's clocks in the sky

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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.