

Abstract Submitted  
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**The Double Pulsar: A Laboratory for Relativistic Gravity and Pulsar Emission Physics** MAURA MCLAUGHLIN, West Virginia University —  
The double pulsar system consists of two radio pulsars in a highly relativistic 2.5-hr orbit. It remains the only pulsar binary system in which both pulsars have been detectable. In this talk, we will present the results from 12 years of timing this unique system, including the best proof ever for the existence of gravitational waves. We will also discuss the interactions between the two pulsars in the system and show how they can be used to probe the size and shape of pulsar magnetospheres and emission heights.

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