

# Fast Radio Bursts as Tools for Astrophysics and Cosmology

*Thursday 18 September 2025 09:00 (15 minutes)*

Fast Radio Bursts (FRBs) are millisecond radio transients of extragalactic origin that have emerged as valuable tools for both astrophysics and cosmology. In this talk, I present recent advances on two complementary fronts: the use of machine learning techniques to classify FRB populations and the application of localized FRBs as model-independent probes of the cosmic expansion. These results illustrate the growing role of FRBs as versatile tools to investigate both their astrophysical nature and fundamental questions in cosmology.

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