

# FRB MULTI-WAVELENGTH AND MULTI-MESSENGER ASTROPHYSICS

*Friday, 12 July 2019 09:30 (30 minutes)*

Abstract: Abstract: Fast radio bursts (FRBs), bright millisecond duration radio transients, are quickly becoming a subject of intense interest in time-domain and high energy astrophysics. FRBs have the exciting potential to be used as cosmological probes of both matter and fundamental parameters, but such studies require large populations. Advances in FRB detection using current and next-generation radio telescopes will enable the growth of the population in the next few years from a few dozen to hundreds. Real-time discovery and follow-up, and new studies of the FRB population will provide us with some of the greatest insights in the coming years. I will discuss many observational aspects of the FRB population, including polarisation, searches for multi-wavelength emission, localisation, and repeating FRBs. I will also discuss how multi-wavelength and multi-messenger astrophysics with FRBs can be maximised with future facilities.

**Primary author:** PETROFF, Emily (University of Amsterdam, Anton Pannekoek Institute )

**Presenter:** PETROFF, Emily (University of Amsterdam, Anton Pannekoek Institute )

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