

## Technical Page

Proposal Type: Regular  
 General Category: Pulsars  
 Observation Category:  
 Total Time Requested: 21+ (depending on burst) Hours

**Proposal Title:** A quasi-periodically (dis)appearing pulsar

**ABSTRACT:**

In this Target-of-Opportunity proposal, we would like to observe a pulsar, which is not visible for most of the time but shows regular outbursts of emission for 4–6 out of 30–40 days, the first time such a phenomenon is observed. The existing data do not seem to be consistent with nulling; a naturally periodic process like precession of the neutron star appears to be more attractive. Existing single frequency observations and limited sensitivity are not sufficient to answer the questions provoked by the observed phenomenon. We propose simultaneous multi-frequency observations between Arecibo and Jodrell Bank to obtain high-sensitivity measurements of single pulses, profiles and polarisation properties, and to explore a likely broad-band nature of this unique new phenomenon in pulsar emission. In case of a burst, a trigger would be sent from the Lovell telescope at Jodrell Bank (1400 MHz) requesting joint observations at Arecibo at 430 MHz.

Name	Institution	E-mail	Phone	Student
Michael Kramer	University of Manchester, Jodrell Bank Observatory	mkramer@jb.man.ac.uk	+44-1477-571321	

I NA want to do remote observing.

**Instrument Setup**

430 G                      430 CH receiver

**Atmospheric Optical Instruments:**

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**

410-450

This proposal requires coordination with AFTWF within the band 425-435 MHz.