

New South Wales

CSIRO - Australia Telescope National Facility

DP0878388 Dr G Hobbs

Approved Project Title **Gravitational wave detection through millisecond pulsar timing**

2008 : \$ 117,306

2009 : \$ 117,306

2010 : \$ 117,306

2011 : \$ 117,306

2012 : \$ 117,306

Primary RFCD 2401 ASTRONOMICAL SCIENCES

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Administering Organisation CSIRO - Australia Telescope National Facility

Project Summary

This project aims to detect gravitational waves (GWs) using precision pulsar timing observations. Direct detection of GWs is of huge international importance and would place Australia at the forefront of the new research field of GW astronomy. The project provides a link between current GW detection experiments and the GW astronomy that will become commonplace with future telescopes such as the Square Kilometre Array (SKA). It will answer important questions in relativistic astrophysics, cosmology and planetary astronomy. The groundwork for SKA science proposed here will demonstrate Australian commitment to the SKA.