

Summary of Discovery Projects Applications for Funding to Commence in 2006

New South Wales

CSIRO - Australia Telescope National Facility

DP0666822 Dr RN Manchester; Dr M Kesteven; Dr S Johnston

Approved **Defeating Radio Frequency Interference**
Project Title

2006 : \$40,000

2007 : \$40,000

2008 : \$40,000

Primary RFCD 2401 ASTRONOMICAL SCIENCES

Administering Institution CSIRO - Australia Telescope National Facility

Project Summary

The radio spectrum is a valuable resource. Development of techniques which minimize the impact of various users on one another, allowing this resource to be shared, will benefit the entire community. For astronomy in particular, shared use is essential because of the very wide bandwidths needed to obtain sufficient sensitivity. Usage of the radio spectrum is increasing rapidly and radio telescopes are becoming more and more sensitive, compounding the problems. The digital signal processing techniques developed under this project will be widely applicable, not only to future radio astronomy facilities such as the Square Kilometer Array, but also to the communications industry generally.