



APRIM 2014

12th Asia-Pacific Regional IAU Meeting
August 18-22, 2014 / DCC, Daejeon, Korea

Session: Plenary Session IV

Date: August 21, 2014 (Thursday)

Time: 09:00~10:30

Room: Grand Ballroom 1

Chair: Lisa Harvey-Smith (CSIRO Astronomy & Space Science)

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09:00~09:30

Astronomy in Antarctica

Michael Burton (University of New South Wales, Australia)

The high Antarctic plateau contains the driest and coldest locations on the surface of our planet. These provide exceptional conditions for a wide range of astronomical observations across the optical, infrared and millimetre wavebands – the result of improved transmission, reduced sky backgrounds and better atmospheric stability than found at temperate sites. The vast quantities of pure ice also facilitate extremely large detectors for neutrino observations. Astronomical facilities are now operating at five locations on the Antarctic plateau – the South Pole, Domes A, C and F, and Ridge A. A range of frontier science investigations are underway, from precision measurements of fluctuations in the cosmic microwave background, to the detection of cosmic neutrinos, to the opening of terahertz frequency windows for wide field spectral line imaging of the interstellar medium, to simultaneous precision measurements of multitudes of time variable stars. Plans for several ambitious facilities for optical/IR and THz frequency measurements are well developed – in particular in China and Japan. This talk will overview the field of astronomy in Antarctica. It will discuss our understanding of the site conditions in Antarctica as they determine the efficacy of astronomical observations. It will overview some of the science highlights that have resulted from measurements made with Antarctic facilities. Finally, it will discuss plans for future facilities on the Antarctic plateau and the science objectives they are being designed to pursue.

[P4-2]

09:30~10:00

Science Goals of the Proposed Indian Solar Space Mission

Durgesh Tripathi (Inter-University Centre for Astronomy and Astrophysics, India)

*To be announced

[P4-3]

10:00~10:30

Next-generation Search for Exoplanets Led by Korea Astronomy Community

Cheongho Han (ChungBuk National University, Korea)

*To be announced