

## **SOLAR TERRESTRIAL AND SPACE PHYSICS RESEARCH AT THE UNIVERSITY OF SYDNEY**

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Space physics is a major research strength of the School of Physics, University of Sydney. A group of approximately 15 people study fundamental plasma physics and space phenomena ranging from Earth's ionosphere to the Sun's surface to the outer boundaries of the heliosphere and solar system, where the Sun's "solar wind" interacts with the local interstellar medium (see <http://www.physics.usyd.edu.au/space-solar.html>). Interests include the acceleration and heating of particles in magnetic reconnection regions and by shocks, generation and propagation of plasma waves and radiation, development and testing of theories for solar (type II and III) and heliospheric radio emissions, the SWAVES instrument on NASA's STEREO spacecraft (launch scheduled for late June 2006), and prediction of space weather based on solar radio bursts. A brief summary of the research interests and analysis techniques used will be given.