

Australian Institute of Physics (SA branch)

http://www.physics.adelaide.edu.au/aip-sa

Please direct enquiries to the following contacts, and not to University Physics Departments.

Secretary Dr Laurence Campbell (08) 8201 2093 laurence.campbell@flinders.edu.au Fax: (08) 8201 3035

Dept. of Physics, Flinders University of S.A., GPO Box 2100, Adelaide, 5001

Meetings Dr John Patterson (08) 8303 5291 jpatters@physics.adelaide.edu.au

AIP Lecture

(Note: Visitors, particularly students in Physics courses, are welcome to attend) at 7:30pm Tuesday September 7th 1999 in the **Kerr Grant** lecture theatre, Physics building, The University of Adelaide.

"OPTICS: don't leave home without it!"

by Jesper Munch
Professor of Experimental Physics
University of Adelaide

Abstract:

Is optics leading developments in modern physics? Not only has a majority of recent Nobel prizes in physics been awarded for optics based investigations, but optics has also revolutionized other specialties such as chemical spectroscopy, remote sensing, precision measurements, communications, medicine and defence. A good education in optics covers much of modern physics, and also leads to excellent, physics based employment opportunities for graduates.

The Optics Group at The University of Adelaide maintains an excellent research programme, spanning the field of optics from fundamental physics to laser engineering and optics for industrial applications. This talk on the importance of optics will be illustrated by specific examples, drawn in part from our own research. It will include work on coherent laser radar for detection of turbulence in front of aircraft, very large space based telescopes, ultra-fast optical computing and the world-wide quest to detect Einstein's gravitational waves, thereby opening up a whole new window to the universe.

AIP members are invited to have dinner together prior to the lecture from 5:45pm onwards in the Equinox restaurant, Union Building at the University of Adelaide. Please make a booking with the AIP-SA secretary (details above) before noon on the day of the lecture. All who attend the lecture are invited to a light supper afterwards.