

Notice of a members' lecture to be presented by the



**Australian Institute of Physics (SA branch)**

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

Please direct enquiries to the following AIP contacts, and not to University Physics departments:

Vice-chair: Dr John Patterson (08) 8303 5291 [jpatters@physics.adelaide.edu.au](mailto:jpatters@physics.adelaide.edu.au)  
Secretary: Dr Laurence Campbell (08) 8201 2093 [laurence.campbell@flinders.edu.au](mailto:laurence.campbell@flinders.edu.au) Fax: (08) 8201 2905  
SOCPEs, Flinders University of S.A., GPO Box 2100, Adelaide, 5001 a.h. (08) 8277 7036

in the **Flentje lecture theatre**  
**Plaza building, Adelaide University**

(Go downstairs at the North-East corner of Hughes Plaza)

at **7:30pm, Tuesday 20<sup>th</sup> June 2000**

**“Laser-assisted collision processes”**

by **Peter J O Teubner**

Professor of Physics

Flinders University of South Australia

### **Abstract:**

The use of lasers in experiments involving electron collisions with atoms has proven to be a very successful technique. On the one hand this technique permits scattering from specific atomic states and on the other hand it provides a means of detecting product states that are impossible to detect by other means. Examples will be given of each of these applications. Specifically we will discuss the technique of superelastic electron scattering from the alkalis and the role that these experiments have played in the development of scattering theory. We will also discuss the use of lasers in the measurement of cross sections for the electronic excitation of the D states in copper and in gold.

### **Biography:**

Prof. Teubner did his undergraduate degree at Adelaide University, where he subsequently completed a PhD in 1967. Following two years as a research associate at the University of Pittsburg, he was appointed as a lecturer at the Flinders University of South Australia, where he is now a Professor in Physics. His research is in Electron Scattering from Atoms and Molecules.

### **Note:**

Visitors, particularly undergraduate students in Physics, are welcome to attend this lecture.