



**Australian Institute of Physics
NSW Branch (July Public Talk)**

“Physics for Medicine and Astronomy”

**Dr Zdenka Kuncic
University of Sydney**

Tuesday 28th July 2009 @ 6.00PM

At the

Slade Lecture Theatre, School of Physics, University of Sydney

Public talk arranged by: The Australian Institute of Physics (NSW Branch)

Entrance is FREE

Summary of talk:

Astronomy and Medicine share many similar demands for increasingly sophisticated and diverse imaging techniques as well as associated cutting-edge instrumentation technologies and advanced software tools for multi-dimensional data storage, manipulation and processing. In addition, there is a less obvious, but equally important need for fundamental physics in modeling radiation transport and radiation detection.

In this talk, Dr Kuncic will present an overview of these synergies, identifying along the way opportunities for knowledge and technology transfer across the two disciplines. She will also discuss a cross-disciplinary research initiative in Astronomy and Medicine currently being established at the School of Physics, University of Sydney.





Brief Biography of the Speaker:

Zdenka's research interests include space plasma physics, theoretical astrophysics and radiation physics. Zdenka is also actively involved in cross-disciplinary research and has been transferring her expertise in radiation transport modelling in particular from high-energy astrophysics to medical physics applications, such as radiation dosimetry, radiation therapy and radiation biophysics. Zdenka is a graduate of the University of Sydney and obtained a PhD from the University of Cambridge. Following a postdoctoral fellowship at ANU, she was subsequently awarded a prestigious Royal Commission for the

Exhibition of 1851 International Research Fellowship, which she undertook at the University of Victoria, Canada. Zdenka is currently Senior Lecturer at the School of Physics, University of Sydney, and coordinator for the postgraduate industry training initiative in Medical Physics.



Detailed Schedule for Tuesday, 28th July 2009:

- 6:00-6.30 pm **REFRESHMENTS, Slade Lecture Theatre.**
- 6.35-7.30 pm **LECTURE by Dr Zdenka Kuncic.**
- 8.00 pm **DINNER with the Speaker at Buon Gusto (Italian), 368 Abercrombie Street, Chippendale.**
E-mail Dr Fred Osman (fred_osman@exemail.com.au) if you will be able to join us for dinner.

Travel Directions:

- Train to Redfern station and walk to the **School of Physics.**
- Buses 422, 423, 426, 428, 448, and 450 from Circular Quay to City Road / King, or 412, 435, 438, 470, 483 etc. along Parramatta Road from Circular Quay.
- Drive and park in various parking lots. You will need to pay for parking (**\$6 flat-rate after 4 pm**) and display the ticket in your car. You may also find parking places on public roads outside the Uni.

Event sponsored by:



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