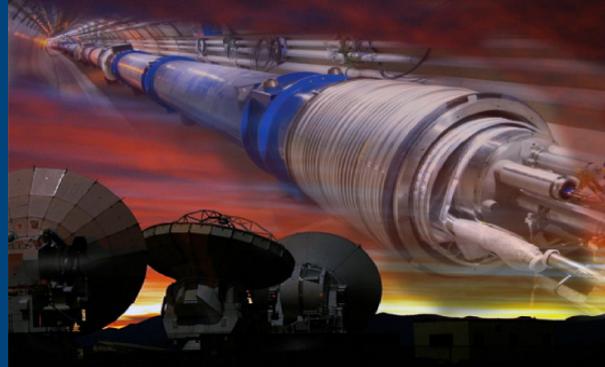




Announcing the Annual School of Physics 2015 VCE In-service Day



When: Friday 13 November: 8:30am (registration) – 3:30pm
Where: Laby Theatre, School of Physics, University of Melbourne
Cost: \$110.00 (inc GST) Morning tea and lunch provided

It's "Out with the old, and in with the new Study Design!"

But what has changed? Teachers, get ready to lead your students in a new direction in Physics! The journey bridges spatial scales from the subatomic through to the planets, stellar systems, and galaxies. Along the way we will discard the traditional 3Rs, replacing them with the 3Es of education: **Engage, Enthuse and Excite!**



Undertaking science that matters with the Australian Synchrotron: How the smallest things can have the biggest impact on our lives

Professor Andrew Peele is the Director of *The Australian Synchrotron*, and a dedicated physicist. Despite the responsibility of administering the highest-energy electron accelerator in Australia, Andrew maintains a strong passion for basic science. His research focuses on the development of new imaging techniques that will allow science to picture the fundamental structure of matter. Of these, the tomographic imaging of cells and micro-structures is the most notable, and will be central to his lecture.



The Bridge between Physics and Engineering: Putting the theory of mechanics into practice

Dr Elisa Lumantarna is from the *School of Engineering at Melbourne University*. Her research interests are in the areas of disaster management, earthquake engineering, and structural dynamics. Elisa understands how the basic physics of materials can be used to make buildings safe from damage caused by nature's largest forces. With a Masters degree in Civil Engineering, she received a PhD in Structural Engineering in 2012. Elisa has an outstanding ability to communicate the physics of structural forces, by using familiar in-class examples.



Modern astrophysics and the night sky: The Shared Sky: modern astrophysics and the night sky viewed through the lens of ancient Greece and aboriginal astronomy

Dr Alan Duffy is a Research Fellow at the *Centre for Astrophysics and Computing at Swinburne University*. He is a professional astrophysicist, and passionate science communicator. His research investigates how galaxies form, as part of a study of the astronomical properties of the universe. One of his missions is to elucidate astronomical concepts to audiences from different backgrounds: hence the title of his lecture, which will specifically compare how the Australian aborigines and the western world picture the universe.



The world of Particle Physics: Collisions can reveal the nature of matter

Professor Raymond Volkas is *Head of the School of Physics at Melbourne University*, and Director of the Melbourne Node of the *ARC Centre of Excellence in Particle Physics at the Terascale (CoEPP)*. He is a theoretical particle-physicist with interests that lie beyond the Standard Model. His research covers neutrinos, particle cosmology, extra dimensions, phenomenology and the early Universe. This lecture will share insights that will enable you to make the world of sub-atomic particles interesting to your students.

To attend, please register at: [School of Physics Outreach](#)

Never attended an In-service Day before? You may be eligible for financial support to attend.

Please refer to the [School of Physics Outreach website](#) for more details on the Laby Grant.

Web link: <http://outreach.physics.unimelb.edu.au/Teaching/Professional-Development>



FOCUS ON PHYSICS

2015 VCE In-service Day

REGISTRATION FORM

AN IN-SERVICE FOR VCE PHYSICS TEACHERS

Personal Details (please complete one form per person)

NAME & SURNAME			
SCHOOL			
ADDRESS			
SUBURB		POSTAL CODE	
TEL NO		E-MAIL	
DIETARY REQUIREMENTS			

ALL FIELDS MUST BE COMPLETED

School Finance Contact Details

NAME OF PERSON IN THE FINANCE DEPARTMENT			
TEL NO		E-MAIL	
SCHOOL PURCHASE ORDER NUMBER			

ALL FIELDS MUST BE COMPLETED

PLEASE NOTE

As there are a limited number of places available, please return your Registration Form as soon as possible to physics-adminstaff@unimelb.edu.au.

- **Online Registration** *Refer web link below*
- **Registration Fee** \$110.00 (incl. GST)
- **Registration Closing Date** 2 November 2015
- **Refund Policy** Notification of cancellation must be made in writing. Cancellations made after 2 November 2015 will incur a charge of 50% of the registration fee.