



**The Australian National University**

**College of Physical Sciences  
Research School of Physical Sciences & Engineering  
Nonlinear Physics Centre**



## **PhD Student Scholarship** (Nonlinear and Tunable Metamaterials)

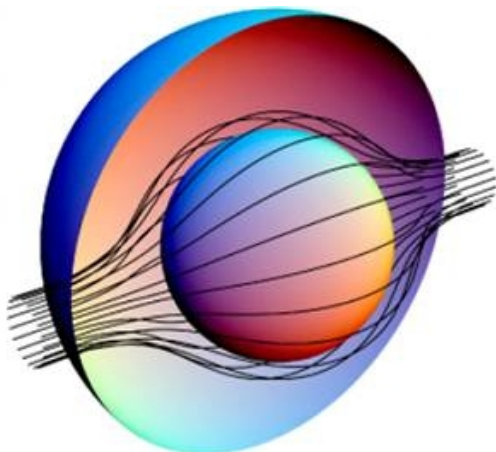
**Do you want to work at the forefront of photonic research ?  
Then this opportunity is for you !**

We are offering PhD scholarships in the experimental and theoretical physics of Nonlinear and Tunable Metamaterials. This is an exciting new area of fundamental research which has the potential to create many novel photonic and microwave devices. Applications of metamaterials include object cloaking and sub-wavelength imaging, and they are strongly linked to the emerging field of transformation optics. By introducing nonlinearity into these structures we are planning to improve the real-world performance of such metamaterials, as well as study the exotic physical phenomena which emerge.

There is scope for both experimental and theoretical projects to be undertaken. Likely tasks for an experimental project include the design, simulation, and measurement of novel structures for manipulating electromagnetic radiation, particularly microwaves. A theoretical project may be on any novel aspect of phenomena occurring within artificial electromagnetic media. We expect that the candidate should have a sound background in microwaves, photonics, or a related field of physics or engineering.

A PhD scholar will be offered a stipend of **AUS \$22,000.00** per annum and support for conference travel within Australia and overseas.

ANU PhD Scholarships - applications for Australian/New Zealand citizens and permanent residents of Australia are normally due by 31 October. However, we may consider applications at any other time of the year. Further information: [www.anu.edu.au/graduate/scholarships/index.php](http://www.anu.edu.au/graduate/scholarships/index.php)



For further information and applications, please contact  
Prof Yuri Kivshar ([ysk124@rsphysse.anu.edu.au](mailto:ysk124@rsphysse.anu.edu.au))

To find out more about us, please visit the following sites:  
Nonlinear Physics Centre

[www.rsphysse.anu.edu.au/nonlinear](http://www.rsphysse.anu.edu.au/nonlinear)