

## **EPSRC Summer School**

## Mathematical Modelling and Computational Methods in Solid Mechanics

26<sup>th</sup> August – 1<sup>st</sup> September 2007

## University of Glasgow

The challenge in computational mechanics is to develop a solution that is *accurate*, *numerically robust*, *stable* and can be solved in a *computationally efficient* manner.

This course will provide training in mathematical modelling and computational methods in solid mechanics:

- ✓ Error estimates & adaptivity
- ✓ Nonlinear solution schemes

Equation solvers for FEA

✓ Meshfree methods

 $\checkmark$ 

- ✓ Multi-scale modelling
- ✓ Biomechanics
- ✓ Computational plasticity & fracture

✓ Nonlinear elastic deformation theory

Speakers include: Prof. R Ogden, Prof. H Askes, Prof. G Holzapfel, Prof. M Geers, Prof. N Bićanić, Dr. A Ramage, Dr. XY Luo, Dr. C Pearce, Dr. P Grassl, Dr. S Bordas and Dr. Z Guo

Participants will develop

- ✓ A deeper knowledge of nonlinear computational solid mechanics
- Confidence in the associated mathematical formulations.

The fee structure is given below. These sums cover accommodation, food, social events and all lecture material. Attendees need only find funds to travel to Glasgow.

UK-based PhD students:
Non UK-based PhD students:
UK-based researchers:
Others:

£100 £250 £250 £600

Please Note: Subsidised places are limited. Preference will be given to EPSRC students

Places are limited and so those interested should register early.



Engineering and Physical Sciences Research Council



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