

# Workshop on numerical modelling in geomechanics



### Friday April 24<sup>th</sup> 2009, 1.00-5.30pm

## Central Square, Forth Street, Newcastle-upon-Tyne

The aim of this workshop is to showcase current research and practice in numerical geomechanics and to discuss future trends. A particular focus will be the transfer of research outputs into industry The workshop is funded as part of a project involving Oasys Ltd, and the Universities of Strathclyde and Durham, which is transferring research findings into the commercial finite element code SAFE.

#### Who should attend?

Geotechnical engineers using commercial FE software for geotechnics and geomechanics, numerical modellers and research students from academia, software developers.

#### Programme

- 1230 Registration and buffet lunch.
- 1300 Introduction Alison Ramage (Dept of Mathematics, University of Strathclyde).
- 1310 Implementing iterative solvers for geotechnical FEA in Oasys SAFE Youliang Zhang (Oasys Ltd and University of Strathclyde).
- 1340 **Future alternatives to finite elements for geotechnical modelling** Charles Augarde (School of Engineering, Durham University).
- 1410 **3D finite elements for geotechnics: an industry perspective** Anton Pillai (Arup Geotechnics, London).
- 1440 Coffee break.
- 1510 **Developments of the BRICK model** Sam Clarke (Sheffield University).
- 1540 Seismic behaviour of gravity quay walls Mohamed Rouainia (Civil Engineering and Geosciences, Newcastle University).
- 1610 **Application of numerical analysis to the Kings Place Project** Phil Stephenson & Mark Skinner (Arup, Newcastle).
- 1640 **Discussion session: "The future of numerical modelling in geotechnics"** chaired by Dr Brian Simpson (Arup Geotechnics, London).
- 1730 Close.

The workshop is free but if you wish to attend please pre-register (before April 20<sup>th</sup>) by emailing <u>charles.augarde@dur.ac.uk</u>

In association with the Dept of Mathematics, University of Strathclyde; Oasys Ltd; the School of Engineering, Durham University; the Northern Geotechnical Group







