University of Southampton

Hans Fangohr

3 minute presentation of each site by its leader (main themes, expertise, resources)

self-introduction of each participant (involvement in particular projects, specific expertise or interests)
Southampton
350 km from Paris
Expertise and tools
Southampton

• Research:
  Python, C, IPython/Jupyter, Cython, Docker, Virtualbox, VTK, py.test, git, mercurial, Jenkins, C++, OCaml, …

• Teaching (undergraduate level only):
  Python, C, IPython, Cython, py.test, …
Computational Micromagnetics

- Developed open source Nmag Software
  - Python user interface
  - OCaml finite element library (nsim)
  - Symbolic operations and code generation
- http://nmag.soton.ac.uk
Resource: Computational Modelling Group

- All academics at Southampton doing computational science and engineering
- 200 professors and 600 active PhD students
- University supercomputer “Iridis” (12,320 cores, 250 Tflops) and other HPC machines
- [http://cmg.soton.ac.uk](http://cmg.soton.ac.uk)
Resource: Doctoral Training Centre in Next Generation Computational Modelling

- 14 million Euro
- ~75 PhD students (15 every year for 5 years)
- 1 year training in computational methods and software engineering
- 3 year research PhD project
- http://ngcm.soton.ac.uk
Computational Scientist
Hans Fangohr
http://www.soton.ac.uk/~fangohr
@ProfCompMod

• Degree in Physics and PhD in High Performance Computing

• Professor for Computational Modelling

• Interests:
  • Software Engineering for Computational Science
  • Application focus in magnetic materials & superconductivity

• Head of Computational Modelling Group and Director of Centre for Doctoral Training in Next Generation Computational Modelling
Numerical relativist
Ian Hawke

Degree in Physics and PhD in High Performance Computing

Associate Professor in Mathematics

Interests:

- Computational Science
- Numerical Relativity

Co-Director of Centre for Doctoral Training in Next Generation Computational Modelling