

# Call for Tutorial Proposals

## NASA/ESA Conference on Adaptive Hardware and Systems (AHS-2009)

**Co-located with DAC-2009**

**July 29 – August 1, 2009**

**Moscone Convention Center  
San Francisco, California, USA**

<http://www.see.ed.ac.uk/~ahs2009/>

Tutorials are scheduled to be held on **Wednesday, 29<sup>th</sup> July 2009**, which is the first day of AHS 2009.

### Topics for the tutorials will include, but are not limited to:

- Built-in tuneable structures and automated tuning
- Automatic/self-calibration
- Built-in self-test and self-repair
- Design and test of integrated system in nano scale
- On-chip learning and adaptation
- Adaptive circuits and configurable IP cores
- Reconfigurable and morphable hardware
- Reconfigurable hardware for space applications
- Embryonic hardware, morphogenesis
- Evolvable hardware
- Design for adaptive systems
- Adaptive embedded system
- Adaptive control circuits and adaptive flight hardware
- Search and optimization algorithms for adaptive hardware
- Hardware implementations of optimization engines
- Learning and evolutionary algorithms for adaptive hardware
- Algorithms for exploring design space of adaptive hardware
- Adaptive computing and run-time reconfiguration
- Adaptation with hardware in the loop
- Adaptive optics
- Adaptive antennas
- Adaptive sensing
- Adaptive MEM/NEMS devices
- Adaptive interfaces
- Hardware for adaptive signal processing
- Adaptive medical and prosthetic devices
- Adaptive wired and wireless networks
- Adaptive hardware for autonomous systems
- Adaptive flight hardware
- Space applications
- Communications applications
- MEMS/NEMS energy scavenging devices
- Emerging technologies-Nanoelectronics
- Reconfigurable computing incl. multi core architectures
- Adaptive wireless for space
- Secure data and information systems
- High-performance reconfigurable computing

Prospective organizers of 2-hour tutorials should submit their proposals to the Tutorials Chair with the following information included:

1. Tutorial title and summary.
2. Lecturer's brief history.
3. Contact details (E-mail, Telephone and Address)

Proposals should be sent to the Tutorials Chair at the following address [ahs-tutorials@see.ed.ac.uk](mailto:ahs-tutorials@see.ed.ac.uk) before the deadline given below.

### Important deadlines:

Proposals due: February 20, 2009

Notification of acceptance: March 1, 2009