

# Call for Work-in-Progress and Demos

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## BIONETICS 2009

### 4th International Conference on Bio-Inspired Models of Network, Information, and Computing Systems

*Sponsored by ICST, technically co-sponsored by IEEE Computer Society and Create-Net*  
Avignon, France, December 8-10, 2009

Technology is taking us to a world where myriads of heavily networked devices interact with the physical world in multiple ways, and at multiple scales, from the global Internet scale down to micro and nano-devices. Many of these devices are highly mobile and autonomous, and must adapt to the surrounding environment in a totally unsupervised way. The fundamental research challenge is the design of robust decentralized computing systems, capable of operating under changing environments and noisy input, and yet exhibit the desired behavior and response time, under constraints such as energy consumption, size, and processing power. These systems should be able to adapt and learn how to react to unforeseen scenarios as well as to display properties comparable to social entities. Biological systems are able to handle many of these challenges with an elegance and efficiency still far beyond current human artifacts. Based on this observation, bio-inspired approaches have been proposed in the past years as a strategy to handle the complexity of such systems. The goal is to obtain methods on how to engineer technical solutions which have similar high stability and efficiency as biological entities often have. The BIONETICS conference aims at bringing together researchers and scientists from several disciplines in computer science and engineering where bio-inspired methods are investigated.

Besides full papers, BIONETICS 2009 features the following two publication tracks:

- **DEMOS** present technology, platforms, algorithms, and applications in an interactive fashion.
- **WORK-IN-PROGRESS (WIP)** papers report on promising early-stage research with initial results.

At least one author of each accepted proposal must register for the conference and present the work. Accepted demo and WIP papers will be published in the proceedings of BIONETICS 2009.

**PAPERS:** Work-in-progress papers and demos articles addressing all areas related to bio-inspired technologies are solicited for this call.

**PUBLICATION:** All submitted DEMOS and WIP papers will be rigorously reviewed by technical program committee members and the reviewers they invite. All accepted DEMOS and WIP papers will be published by Springer in the Lecture Notes of ICST (LNICST) series.

## IMPORTANT DATES

Paper Submission Due Date	September 15th, 2009
Notification of Acceptance	October 10 <sup>th</sup> , 2009
Camera Ready Versions Due	October 30 <sup>th</sup> , 2009