

# 1<sup>st</sup> International Workshop on Algorithmic Aspects of Wireless Sensor Networks (AlgoSensors 04)

July 16 2004, Turku, Finland  
To be held in conjunction with ICALP 2004  
<http://ru1.cti.gr/algosensors04/>

**Scope:** Wireless ad-hoc sensor networks have become a very important research subject due to their potential of providing diverse services to numerous applications. The realization of sensor networks requires intensive technical research and development efforts especially in power aware scalable wireless ad hoc communications protocols due to their unusual application requirements and constraints.

On the other hand, a solid theoretical background seems necessary for sensor networks to achieve their full potential. It is an algorithmic challenge to achieve efficient and robust realizations of such large, highly-dynamic, complex, non-conventional networking environments. Features including the huge number of sensor devices involved, the severe power, computational and memory limitations, their dense deployment and frequent failures, pose new design, analysis and implementation challenges.

**Topics:** Contributions solicited cover a variety of topics including but not limited to:

- \* Modeling of specific sensor networks
- \* Algorithms for sensor localization and tracking of mobile users
- \* Hierarchical clustering architectures
- \* Routing: implosion issues and resource management
- \* Media access control in sensor networks
- \* Sensor architecture
- \* Methods for ad hoc deployment
- \* Dynamic sensor networks
- \* Attribute-based named nets
- \* Communication protocols
- \* Simulators for sensor networks
- \* Energy issues

## Workshop Chairs

Sotiris Nikolettseas, U. of Patras and CTI

Jose Rolim, U. of Geneva

## Program Committee

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Peter Triantafilloy, U. of Patras

Eli Upfal, Brown U.

Jennifer Welch, Texas A&M U.

Peter Widmayer, ETH Zurich

**Invited Speakers** Viktor Prasanna, U. of Southern California

**Proceedings:** The accepted papers will be published by the Lecture Notes in Computer Science (LNCS) Series of Springer Verlag, in a hardcopy volume and will be available during the Workshop.

Selected high quality papers will be considered for publication on a Special Issue on Wireless Sensor Networks of the **Theoretical Computer Science (TCS) Journal**.

**Paper Submission:** Authors are invited to submit manuscripts reporting original unpublished research and recent developments in the topics related to the workshop. Papers should not exceed twelve (12) SINGLE-spaced pages of text using at least 11 point size type on 8.5 x 11 inch pages, including references, figures, tables, etc. Additional material may be added at a clearly marked Appendix to be read at the discretion of the Program Committee Members.

Papers should be submitted electronically in Postscript or PDF format by sending an e-mail attachment to [algosensors04@cti.gr](mailto:algosensors04@cti.gr)

## Important Dates:

- Submission Deadline: 3 April
- Author Notification: 3 May
- Final Manuscript Due: 12 May