



The 2nd International Workshop on Advances in Wireless Sensor Networks 2007 (IWASN 2007)

Aug 6th, 2007 - Philadelphia, PA, USA

<http://www.iwasn.org>

Venue: Cherry room, The Radisson Plaza-Warwick Hotel Philadelphia

Technical Program

- 08:30 – 08:35 **Opening and Welcome**
- 08:35 – 10:00 **Keynote Speech: “[Distributed Estimation Using Wireless Sensor Networks](#)”**
Professor Georgios B. Giannakis
IEEE Signal Processing Society Distinguished Lecturer
University of Minnesota, USA
- 10:00 – 10:30 **Coffee Break**
- Session 1: Localization, Topology Control & Coverage**
Session Chair: TBA
- 10:30 – 10:50 **Smart Tracker: Light Weight Infrastructure-less Assets Tracking solution for Ubiquitous Computing Environment**
Nilothpal Talukder, Sheikh I Ahamed* and Rezaul M Abid†*
* Marquette University, USA
† Schneider National, Inc., USA
- 10:50 – 11:10 **Asynchronous Self-Localization of Sensor Networks with Large Clock Drift**
Chunpeng Yan and H. Howard Fan
University of Cincinnati, USA
- 11:10 – 11:30 **Optimal Relay Node Fault Recovery**
Fei Che, Liang Zhao, and Errol L.Lloyd
University of Delaware, USA
- 11:30 – 11:50 **A Distributed Topology Control Algorithm in the Presence of Multipath Propagation**
Harish Sethu and Thomas Gerety
Drexel University, USA
- 11:50 – 12:10 **Diffusion-based Approach to Deploying Wireless Sensors to Satisfy Coverage, Connectivity and Reliability**
Renita Machado, Sirin Tekinay
New Jersey Institute of Technology, USA

12:10 – 13:40 **Lunch** (at Warwick room)

Session 2: Security & Synchronization

Session Chair: TBA

13:40 – 14:00 **Secure Multiple Deployment in Wireless Sensor Networks**

Guorui Li, Jingsha He and Yingfang Fu
Beijing University of Technology, China

14:00 – 14:20 **Secure Data Transmission of Wireless Sensor Network Based on Information Hiding**

Xiangrong Xiao, Xingming Sun, Lincong Yang, Minggang Chen
Hunan University, China

14:20 – 14:40 **Time Division Flooding Synchronization Protocol for Sensor Networks**

Yi Zeng, Bo Hu and Hui Feng
Fudan University, China

14:40 – 15:00 **An Alamouti Coded Cooperative Transmission Robust to Both Timing Errors and Frequency Offsets**

Zheng Li and Xiang-Gen Xia
University of Delaware, USA

15:00 – 15:30 **Tea Break**

Session 3: Power Management & Energy-efficient Design

Session Chair: TBA

15:30 – 15:50 **Reliable Data Gathering in Tree-Based IEEE 802.15.4 Wireless Sensor Networks**

Daniele Messina, Marco Ortolani, and Giuseppe Lo Re
University of Palermo, Italy

15:50 – 16:10 **An Energy Efficiency Scheme Using Local SNR for Clustered Wireless Sensor Networks**

Qianyu Ye, Yu Liu*, Lin Zhang*, Chan-hyun Youn†*

* Beijing University of Posts and Telecommunications, China

† Information and Communications University, Republic of Korea

16:10 – 16:30 **An Efficient Bi-directional Routing Protocol for Wireless Sensor Networks**

Inwhae Joe, Taewon Ahn
Hanyang University, Korea

16:30 – 16:45 **Workshop Closes**