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Energy-Efficient Scheduling and MAC for Sensor Networks, WPANs, WLANs and WMANs

Guest Editor
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Energy efficiency is very important for all mobile/wireless devices due to mobility of these devices. The recent evolution of sensor networks, Wireless Personal Area Networks (WPANs), Wireless Local Area Networks (WLANs), and Wireless Metropolitan Area Networks (WMANs) has yielded a demand to improve energy-efferent scheduling algorithms and energy-efferent Medium Access Control (MAC) protocols. The effort to improve energy-efferent scheduling and MAC is linked with many technical challenges including compatibility with legacy networks, complexity in implementation, and practical values in real market, etc. The need to address energy saving solutions and provide timely, solid technical contributions of these networks establishes the motivation behind this special issue.

This special issue of *Computer Communications* focuses on the novel and practical ways to improve energy saving solutions for Sensor networks, WPANs, WLANs, and WMANs.

- Energy-efficient scheduling such as sleep-mode
- Energy-efferent MAC
- Optimization of energy-efficient scheduling and energy-efficient MAC
- Performance analysis and modeling of energy-efficient scheduling and energy-efficient MAC

Papers with the following topics *will not be reviewed*, but should be submitted to the regular issues or other special issues.

- Papers that *do not*
  - focus on energy-efferent scheduling algorithms and energy-efferent MAC protocols;
  - belong to Sensor networks, WPANs, WLANs, or WMANs

- Papers that focus on
  - Energy-efferent routing protocols;
  - Energy-efferent protocols/algorithms in IP layer or above;
  - Energy-efferent protocols/algorithms in PHY layer.
  - Transmission Power Management.
  - A NP-Complete or NP-hard problem

IMPORTANT DATES
Deadline for submissions: June 15, 2005
Notification of acceptance: October 1st, 2005
Final papers due: October 10, 2005

SUBMISSION GUIDELINES
Guidelines on formatting the paper are given at http://www.elsevier.com/locate/comcom. Manuscripts should be submitted as an e-mail attachment in PDF format to Yang Xiao at yangxiao@memphis.edu. If the file is larger than 1MB, the authors are encouraged to use WINZIP.

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