

Call for Papers

Special Issue on Cooperation in Wireless Networks

Springer – Wireless Personal Communications

"The real egoistic behavior is to cooperate!" K. Edwin

SCOPE OF SPECIAL ISSUE

Cooperation between devices in wireless networks has been identified as one of the key technology enablers required to facilitate next generation wireless communication systems. Much of the existing research in wireless networking assumes a point to point communication between a terminal and a centralized access point. For reasons of self-interest, users may however allow terminals to engage in cooperative behavior, resulting in improved overall network performance. For cooperation, terminals will connect to each other using a short range communication link and simultaneously being connected to the centralized access point. This configuration allows many forms of cooperation.

For this special issue, we distinguish between altruism and cooperation by requiring that cooperation benefit each entity involved. From this perspective, pure relaying is an example of altruism and not cooperation. Cooperation is not limited to a single ISO/OSI protocol layer, but can be addressed across multiple protocol layers. The focus of this call is to solicit novel papers addressing cooperation over all protocol layers from physical to application layer.

SUBMISSION AND IMPORTANT DATES

Papers should follow the Springer format (11pt, single column, double spaced) and not exceed twenty pages including figures and tables. Original papers should be send by submission deadline to¹

cooperation@kom.aau.dk

Dissemination of the Call	1st May
Submission deadline	1st October
Notification	15th January
Final version	15th February
Planned Issue	2nd half 2006

TOPICS OF INTEREST

Original papers are invited in the area of cooperation in wireless networks. Papers must represent high-quality and previously unpublished work. Topics of interest include, but are not limited to, the following areas of cooperative wireless networks:

Architectural Principles	Multi-Access Capability
Network Coding	Radio Access Technologies
Cooperative Processing	Resource Management
Distributed Radio	Cooperative Channel Coding
Heterogenous Networks	Terminal design
Self-organizing networks	Cognitive Networks
Middle-Ware	Grid-Computing
Source coding for cooperation	Cooperating Services

GUEST EDITORS

Frank H.P. Fitzek
Aalborg University, Denmark
ff@kom.aau.dk

Mischa Dohler
France Telecom R&D
mischa.dohler@francetelecom.com

Ian Opperman
CWC, Oulu, Finland
ian@ee.oulu.fi

Antonella Molinaro
University "Mediterranea" of Reggio Calabria, Italy
molinaro@deis.unical.it

Marcos Katz
SAMSUNG, Korea
marcos.katz@samsung.com

Christian Bettstetter
DoCoMo Euro-Labs, Germany
bettstetter@docomolab-euro.com

¹Version 1.0. Updates on the call are available at <http://kom.aau.dk/~ff/CfPCoNet.pdf> and <http://kom.aau.dk/~ff/CfPCoNet.html>