

30. Treffen der VDE/ITG-Fachgruppe 5.2.4
Mobilität in IP-basierten Netzen
am 29. Juni (Open Workshop) und 30. Juni 2009 in Klagenfurt

Call for Contributions

Within its series of round tables, the VDE/ITG Section 5.2.4 "Mobility in IP-based Networks" will organize a one day workshop on the topic

Cooperation and Self-Organization in Communication Networks

The workshop will take place at Lakeside Labs GmbH (Klagenfurt, Austria) on June 29th, 2009.

We solicit

- Technical overview presentations
- Project presentations
- Presentations of results of ongoing research
- Visionary (possibly provocative) presentations

Today's communication networks are becoming more and more large in scale, which results in increased complexity for their engineering, operation, and maintenance. To this end, the concepts of cooperative communications and self-organizing systems have recently attracted considerable attention. In cooperative communications, different nodes in a network share resources to establish collaboration through distributed transmission/processing. They assist each other to improve overall network performance and achieve better utilization of space-time resources without the need for a centralized authority.

Self-organizing systems represent a paradigm shift, where the global service of a system emerges from the local interactions of a large number of autonomous components that act based on simple rules. In comparison to traditional, often centralized architectures, self-organizing systems are often advantageous regarding robustness, scalability, and adaptability.

The integration of self-organizing and cooperation concepts into communication networks promises new approaches to solve problems of network complexity, spontaneous communications, and scalability, to mention a few. The objective of this workshop is to create a forum to exchange ideas and share experiences in these fields among researchers, professionals, and application developers both from industry and academia. Topics of particular interest include but are not limited to:

- Biologically-inspired and evolutionary approaches for communications and networking
- Management and control of self-organizing networked systems
- Theory of cooperation and self-organization
- Cooperation and self-organizing at the user/social and application level
- Cooperative relaying in wireless systems
- Cross layer cooperation and optimization
- Network coding, as a form of cooperative communications
- Robustness, dependability, and security issues
- Resource utilization and coverage extension via cooperation
- Use cases for self-organization and standardization activities in 3GPP, NGMN or ETSI
- Practical experiences, testbeds or prototypes

Please inform the workshop organisers about your planned contribution by June 6th, 2009. The workshop places are limited and assigned on a first come first serve basis. Participants should register by email by June 14th, 2009. More details about the ITG/VDE meeting will be available soon via the webpage. For further questions, please do not hesitate to contact the workshop organisers:

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