

European Workshop on Broadband Femtocell Networks

Towards ubiquitous high bitrate coverage



14th June 2011

Warsaw, Poland

Workshop chairs

Josep Vidal, UPC, Spain Thierry Lestable, SAGECOM, France

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Stefan Schmid, NEC, Germany Sergio Barbarossa, Univ. of Rome, Italy Frank Zdarsky, NEC, Germany

Technical program committee

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- A. Tyrrell, Docomo Eurolabs, Germany
- A. ul Quddus, Univ. of Surrey, UK
- G. Vivier, Sequans, France

Submission guidelines

The workshop accepts only novel, previously unpublished papers, following the submission guidelines at http://www.futurenetworksummit.eu/2011/. Accepted papers must be presented at the workshop by one of the authors to be incorporated in proceedings.

Important dates

| 1 March 2011 |
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| 21 March 2011 |
| 28 March 2011 |
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Recent years have witnessed an increasing demand for mobile wireless traffic due to the new types of user terminal and applications. The delivery of high throughput at cell edge, indoor and dead-spots is still a challenge. This has motivated the introduction of femtocells in 3G, LTE and WiMAX networks, initially targeting deployments in residential and corporate environment, to get better indoor voice and data coverage, whilst offloading at the same time macrocell traffic and promising to be a cost-effective solution. Femtocells are called to be an integral part of high-performance next-generation wireless systems, while keeping the seamless connectivity and mobility of conventional cellular networks. This workshop aims at covering the different technical challenges to which femtocell deployments are confronted.

Scope and topics of interest

This workshop, co-located with the Future Networks and Mobile Summit 2011 (http://www.futurenetworksummit.eu/2011/), is organized thanks to the joint efforts and collaboration of the FP7 European research projects FREEDOM and BeFEMTO, both conducting edge research on femtocell-related technologies. The main objective is to offer an opportunity for academic and industrial researchers for spreading and sharing results and understanding on femtocell networks. Topics of interest may include, but are not limited to, the following:

- Interference management and coordination: (e)ICIC
- PHY/MAC layer enhancement techniques
- Cognitive femtocell networks
- Channel and interference models
- Self-organising networks (SON), self-configuration and optimization techniques (e.g. power setting, mobility-robust optimization, load balancing)
- Resource allocation techniques (RRM)
- Routing algorithms
- Mobility support
- Network architectures and features (e.g. LIPA, SIPTO, IFOM)
- Trade-offs and benchmarking between femtocells, picocells and relay networks
- Regulatory aspects (e.g. co-existence, new spectrum, lawful interception) and business cases

The workshop programme will feature regular technical presentations plus three keynote speeches, followed by a round table.

Accepted papers will be published online in IEEE Xplore Digital Library. Best papers will be invited to submit a longer version to a EURASIP journal special issue on femtocell networks.