ITC 2011

Call for Papers

San Francisco, USA

September 6-8, 2011

http://www.itc-conference.org/2011/   **23rd International Teletraffic Congress**

ITC provides a venue for researchers from academia and industry interested in design and control of communication networks, protocols, and applications. The rapid evolution in these areas, driven by technological advances and new business models, raises a critical need for continuous reappraisal of modeling, control and management mechanisms. For instance, as energy becomes an increasingly important design criterion, new algorithms are needed to optimize the tradeoff between energy consumption and quality of service.

In addition to improving network efficiency and performance, there has recently been a significant interest in new network architectural principles. How should the lower layers be structured to best support content-centric networking? What network control and optimization issues are raised by virtualization and cloud computing? What architectural elements and business models are needed to meet user expectations for service quality, reliability and security in a cost-effective way?

Now annually held, ITC 2011 solicits submission of papers with original contributions, especially contributions that address novel issues, pioneer disruptive paradigms, or propose innovative models and techniques. Furthermore, papers that provide important insights on real-world networking problems, e.g., based on measurements, application of analytical techniques or simulations, are strongly encouraged.

Network architectures, paradigms & technologies
* Cognitive radio networking
* Content delivery and storage area networks
* Data Center Networks
* Delay-tolerant and opportunistic networking
* Future Internet design
* IP/MPLS/Carrier Ethernet networks
* Multi-carrier networks
* Optical networks
* Sensor networks
* UMTS, WiFi, WiMax, LTE, 4G networks
* Wireless ad hoc and mesh networks

Network planning, QoS, and associated performance issues
* Capacity planning methods and tools
* Planning for multi-carrier networks, robustness and reliability
* Performance and reliability tradeoffs, including targets for web-based applications
* Network design methods
* Performance over wireless and wireline transport technologies
* Pricing and billing, business models for QoS
* QoS provisioning
* SLA monitoring
* Regulatory and public policy QoS issues

Traffic management and measurement
* Admission control
* Application and content traffic management
* Dynamic bandwidth management
* Intelligent adaptive routing
* Location and mobility management
* Multi-domain issues
* Network tomography, analysis of traffic matrices
* Overload and congestion control protocols and mechanisms
* Protection, switching and restoration
* Traffic and performance monitoring, measurements and forecasting
* Regulatory and public policy traffic management issues

Applications
* Application layer networks and overlays, including virtualization
* Distributed, grid and cloud computing
* Efficient content delivery technologies
* Internet of Things
* IPTV, WebTV
* P2P and distributed lookup
* Social networks

* Tele-medicine, -education, -metry
* Web-services and service-oriented architectures

Security issues
* Anomaly detection, detection of DoS attacks
* Attack mitigation methods
* Epidemiological models, worm and virus propagation
* Privacy and trust

Models and techniques
* Cross-layer design and optimization mechanisms
* Game-theoretic models
* Optimization algorithms, self-optimization approaches
* Performance models for voice, video, data, P2P applications
* Random graph models
* Resource allocation and management, scheduling algorithms
* Simulation methods and tools

IMPORTANT DATES

PUBLICATIONS AND AWARDS
Submitted manuscripts must be unpublished and not be considered for publication elsewhere over the course of the review process. All paper registrations and submissions will be handled electronically via EDAS (http://edas.info/newPaper.php?c=8968). Authors should prepare a PDF version which should not exceed 8 double-column pages in IEEE conference format with a font size no smaller than 10 points.

All accepted contributions will appear as full papers in the conference proceedings with oral presentations. The proceedings will be available through IEEE Xplore.

ITC 2011 plans to offers two prestigious awards: a **Best Paper Award** and a **Best Student Paper Award**. For a paper to be eligible in the latter category, a full-time student must be the first author at the time of submission of the paper, & is the presenter of the accepted paper at the conference.

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