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CONFERENCE PROGRAM

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Preliminary Technical Program

Preliminary technical program including abstracts in PostScript Format [.ps](#) or [.ps.gz](#), Portable Document Format [.pdf](#), or in [HTML](#) format.

Introduction Session

Wednesday, Aug 30, 9.00-10.15

- **Welcome**
- **SIGCOMM Award Ceremony**
André Danthine (University of Liege, Belgium)
- **Keynote Speech**
André Danthine

Session 1: Multicast and Anycast

Wednesday, Aug 30, 10.45-12.15

- **A Framework for Scalable Global IP-Anycast (GIA)** ([abstract](#), [paper](#))
Dina Katabi, John Wroclawski (Massachusetts Institute of Technology)
- **pgmcc: A TCP-friendly Single-Rate Multicast Congestion Control Scheme** ([abstract](#), [paper](#))
Luigi Rizzo (Universita di Pisa)
- **Fault Tolerance in Multicast Tree** ([abstract](#), [paper](#))
Anoop Reddy, Ramesh Govindan, Deborah Estrin (USC/Information Sciences Institute)

Session 2: Control Mechanisms

Wednesday, Aug 30, 13.30-15.00

- **Equation-Based Congestion Control for Unicast Applications** ([abstract](#), [paper](#))
Sally Floyd, Mark Handley (AT&T; Center for Internet Research at ICSI), *Jitendra Padhye* (University of Massachusetts, Amherst), *Joerg Widmer* (AT&T; Center for Internet Research at ICSI)
- **Endpoint Admission Control: Architectural Issues and Performance** ([abstract](#), [paper](#))
Lee Breslau (AT&T; Research), *Edward Knightly* (Rice University), *Scott Shenker* (AT&T; Center for Internet Research at ICSI), *Ion Stoica, Hui Zhang* (CMU)
- **Decoupling QoS Control from Core Routers: A Novel Bandwidth Broker Architecture for Scalable Support of Guaranteed Services** ([abstract](#), [paper](#))
Zhi-Li Zhang, Zhenhai Duan (University of Minnesota), *Lixin Gao* (Smith College), *Yiwei Thomas Hou* (Fujitsu Labs)

Session 3: World Wide Web

Wednesday, Aug 30, 15.30-17.00

- **A Content-based Technique for Eliminating Redundant Web Traffic** ([abstract](#), [paper](#))
Neil T. Spring, David Wetherall (University of Washington)
- **On Network-Aware Clustering of Web Clients** ([abstract](#), [paper](#))
Balachander Krishnamurthy (AT&T; Research), *Jia Wang* (Cornell University)

- **The Content and Access Dynamics of a Busy Web Site: Findings and Implications** ([abstract](#), [paper](#))
Venkata N Padmanabhan (Microsoft Research), *Lili Qiu* (Cornell University)

Session 4: Performance Analysis and Modeling

Thursday, Aug 31, 9.00-10.30

- **Critical Path Analysis of TCP Transmission** ([abstract](#), [paper](#))
Paul Barford, *Mark Crovella* (Boston University)
- **Tuning RED for Web Traffic** ([abstract](#), [paper](#))
Mikkel Christiansen, *Kevin Jeffay*, *David Ott*, *F. Donelson Smith* (University of North Carolina at Chapel Hill)
- **A Fluid-based Analysis of a Network of AQM Routers Supporting TCP Flows with an Application to RED** ([abstract](#), [paper](#))
Vishal Misra, *Wei Bo Gong*, *Don Towsley* (University of Massachusetts, Amherst)

Session 5: Routing Stability and Convergence

Thursday, Aug 31, 11.00-12.00

- **Routing Stability in Congested Network: Experimentation and Analysis** ([abstract](#), [paper](#))
Aman Shaikh (University of California, Santa Cruz), *Lampros Kalampoukas*, *Rohit Dube* (Bell Labs, Lucent Technologies), *Anujan Varma* (University of California, Santa Cruz)
- **An Experimental Study of Delayed Internet Routing Convergence** ([abstract](#), [paper](#))
Craig Labovitz (Microsoft Research), *Abha Ahuja*, *Abhijit Abose*, *Farnam Jahanian* (University of Michigan)

Session 6: Routing and Bridging

Thursday, Aug 31, 13.30-14.30

- **FIRE: Flexible Intra-AS Routing Environment** ([abstract](#), [paper](#))
Craig Partridge (BBN Technologies), *Alex C. Snoeren* (BBN Technologies & Massachusetts Institute of Technology), *Tim Strayer*, *Beverly Schwartz*, *Matthew Condell*, *Isidro Castineyra* (BBN Technologies)
- **SmartBridge: A Scalable Bridge Architecture** ([abstract](#), [paper](#))
Thomas L. Rodeheffer, *Chandramohan A. Thekkath* (Compaq Systems Research Center), *Darrell Anderson* (Duke University)

Student Poster Session: Work in Progress

Thursday, Aug 31, 14.30-15.30

- **Student Poster Exhibition**
Click [here](#) for instructions for submission.

Session 7: TCP Analysis

Thursday, Aug 31, 15.30-17.00

- **TCP is Max-Plus Linear** ([abstract](#), [paper](#))
Francois Baccelli, *Dohy Hong* (ENS-INRIA)
- **A Stochastic Model of TCP/IP with Stationary Random Losses** ([abstract](#), [paper](#))
Eitan Altman, *Kostia Avrachenkov*, *Chadi Barakat* (INRIA)
- **On the Propagation of Long-range Dependency in the Internet** ([abstract](#), [paper](#))
Andras Veres (Ericsson), *Zsolt Kenesi*, *Sandor Molnar* (Technical University of Budapest), *Gabor Vattay* (Eotvos University, Budapest)

Session 8: Tracing and Measurement

Friday, Sep 1, 9.00-11.00

- **Deriving Traffic Demands for Operational IP Networks: Methodology and Experience** ([abstract](#), [paper](#))
Anja Feldmann (University of Saarbruecken), *Albert Greenberg*, *Carsten Lund*, *Nick Reingold*, *Jennifer Rexford*, *Fred True* (AT&T; Research)
- **Trajectory Sampling for Traffic Measurement** ([abstract](#), [paper](#))
Nick Duffield, *Matthias Grossglauser* (AT&T; Research)
- **Measuring Link Bandwidth Using a Deterministic Model of Packet Delay** ([abstract](#), [paper](#))
Kevin Lai, *Mary Baker* (Stanford University)
- **Practical Network Support For IP Traceback** ([abstract](#), [paper](#))
Stefan Savage, *David Wetherall*, *Anna Karlin*, *Tom Anderson* (University of Washington)

Session 9: Header Processing

Friday, Sep 1, 11.30-13.00

- **When the CRC and TCP Checksum Disagree** ([abstract](#), [paper](#))
Jonathan Stone (Stanford University), *Craig Partridge* (BBN Technologies)
- **Packet Types: Abstract Specification of Network Protocol Message** ([abstract](#), [paper](#))
Peter J. McCann, *Satish Chandra* (Bell Labs, Lucent Technologies)
- **Terabit IP Lookups** ([abstract](#), [paper](#))
Sandeep Sikka (Inktomi), *George Varghese* (UCSD)