

# IPTComm 2008

Principles, Systems and Applications of IP Telecommunications



**Services and Security for  
Next Generation Networks**

Heidelberg, Germany



# IPTComm 2008

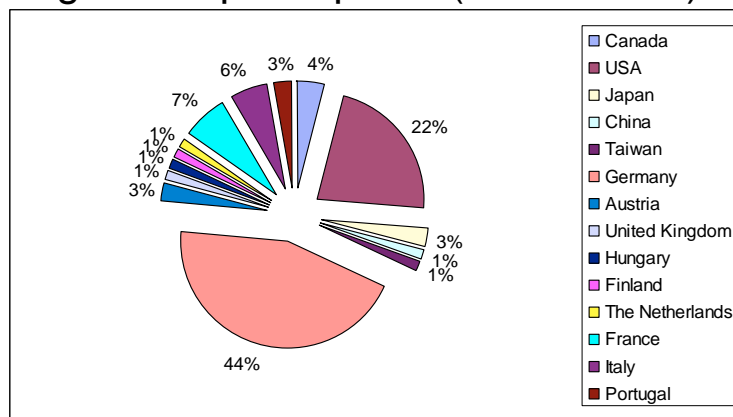
Principles, Systems and Applications of IP Telecommunications

- 1 Welcome!
- 1 Some stats
  - 1 16 papers accepted out of 52 submissions (30%)
  - 1 Registered participants (as of 28.06.08)
    - 1 more than 70 participants
    - 1 14 countries (9 in Europe)
    - 1 about 20% of students
    - 1 industry (including R&D) vs. academia (50/50)

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## 1 Registered participants (countries %)



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## 1 Acknowledgments

- 1 Pamela Zave (AT&T Laboratories)
  - 1 conference co-chair
- 1 Henning Schulzrinne (Columbia University) and Radu State (INRIA)
  - 1 TPC co-chairs
- 1 Gregory Bond (AT&T Laboratories)
  - 1 Publicity chair (and much more)

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## 1 Acknowledgments

- 1 Ellen Tallas (EURESCOM), Sabine Schneider, Sabine Schwinn, Diego Costantini, Nico d'Heureuse, Thilo Ewald, Jan Seedorf (NEC Laboratories Europe)
  - 1 local organization, logistic support

## 1 Thanks to our sponsors



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## 1 Acknowledgments

- 1 Eric Chen (NTT Information Sharing Platform Laboratories), Thomas Magedanz (TU Berlin / Fraunhofer FOKUS) and Carol Davids (Illinois Institute of Technology)
  - 1 Industry Talks Committee
- 1 Dorgham Sisalem (Tekelec) and Ali Fessi (University of Tubingen)
  - 1 Demo Committee

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## 1 Keynote speaker

1 Dr. Ralf Steinmetz, Professor,  
Multimedia Communications Lab  
(TU Darmstadt, DE)

1 Title of the talk:  
“Real-time Communications  
and Services in 2018 and  
Beyond”



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1 Coffee break (10:10 – 10:40)

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- 1 **10:40 – 12:10 Session I: SIP and new service environments**
- 1 Session Chair: Gregory Bond (AT&T Laboratories, US)
- 1 A SIP-based Programming Framework for Advanced Telephony Applications
  - 1 *Wilfried Jouve (INRIA / LaBRI, FR); Nicolas Palix (LaBRI/INRIA, FR); Charles Conzel (LaBRI/INRIA, FR); Patrice Kadionik (IMS, University of Bordeaux, FR)*
- 1 An IMS Based Mobile Podcasting Architecture Supporting Multicast Delivery
  - 1 *Heiko Perkuhn (Ericsson Research, DE)*
- 1 Generalized Third-Party Call Control in SIP Networks
  - 1 *Eric Cheung (AT&T, US); Pamela Zave (AT&T Laboratories, US)*

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1 **13:30 - 15:00 Session II: Attack detection and mitigation in SIP networks**

1 Session Chair: Radu State (INRIA, FR)

1 Automatic Adaptation and Analysis of SIP Headers using Decision Trees

1 *Karin Hummel; Michael Nussbaumer; Andrea Hess Helmut Hlavacs (Univ. of Vienna, AT); Karin Hummel (University of Vienna, AT); Michael Nussbaumer (University of Vienna, AT); Andrea Hess (University of Vienna, AT)*

1 A Self-Learning System for Detection of Anomalous SIP Messages

1 *Konrad Rieck (Fraunhofer FIRST, DE); Stefan Wahl (Alcatel-Lucent, DE); Pavel Laskov (Fraunhofer FIRST, DE); Peter Domschitz (Alcatel-Lucent, DE); Klaus-Robert Müller (Technical University of Berlin, DE)*

1 Secure SIP: A scalable prevention mechanism for DoS attacks on SIP based VoIP systems

1 *Gaston Ormazabal (Verizon, US); Henning Schulzrinne (Columbia University, US); Eilon Yardeni (Columbia University, US); Sarvesh Nagpal (Columbia University, US)*

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- 1 **15:30 – 17:30 Session III: Performance management in SIP networks**
- 1 Session Chair: Saverio Niccolini (NEC Laboratories Europe, DE)
- 1 One Server Per City: Using TCP for Very Large SIP Servers
  - 1 Kumiko Ono (Columbia University, US); Henning Schulzrinne (Columbia University, US)
- 1 SIP Server Overload Control: Design and Evaluation
  - 1 Charles Shen (Columbia University, US); Henning Schulzrinne (Columbia University, US)
- 1 Improving the scalability of an IMS-compliant conferencing framework. Part II: involving mixing and floor control
  - 1 Simon Pietro Romano (University of Napoli Federico II, IT); Alessandro Amirante (University of Napoli Federico II, IT); Tobia Castaldi (University of Napoli Federico II, IT); Lorenzo Miniero (University of Napoli Federico II, IT)
- 1 On Mechanisms for Deadlock Avoidance in SIP Servlet Containers
  - 1 Laura Dillon; Kurt Stirewalt; Yi Huang (Michigan State University, US)

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- 1 **Brewery tour**
- 1 Date: Tuesday, July 1, 2007
- 1 Time
  - 1 18:30 (Group A)
  - 1 19:30 (Group B)
- 1 Location: Kulturbrauerei Heidelberg, Leyergasse 6, D-69117 Heidelberg
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## 1 Social event

- 1 Date: Tuesday, July 1, 2007
- 1 Location: Kulturbrauerei Heidelberg,  
Leyergasse 6, D-69117 Heidelberg

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- 1 **09:00 – 10:30 Session IV: Security, legal and modeling issues of SIP based communications**
- 1 Session Chair: Henning Schulzrinne (Columbia University, US)
- 1 Lawful Interception in P2P-based VoIP Systems
  - 1 *Jan Seedorf (NEC Europe Ltd., DE)*
- 1 Security Analysis of an IP Phone: Cisco 7960G
  - 1 *Italo Dacosta (Georgia Institute of Technology, US)*
- 1 Understanding SIP Through Model-Checking
  - 1 *Pamela Zave (AT&T Laboratories, US)*

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- 1 Coffee break (10:30 – 11:00)
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- 1 **11:00 – 12:30 Session V: Service-oriented optimizations and applications**
- 1 Session Chair: Pamela Zave (AT&T Laboratories, US)
- 1 Detecting VoIP Traffic Based on Human Conversation Patterns
  - 1 *Chen-Chi Wu (National Taiwan University, TW); Kuan-Ta Chen (Academia Sinica, TW); Yu-Chun Chang (National Taiwan University, TW); Chin-Laung Lei (National Taiwan University, TW)*
- 1 Template-based Signaling Compression for Push-To-Talk over Cellular (PoC)
  - 1 *Andrea Forte (Columbia University, US); Henning Schulzrinne (Columbia University, US)*
- 1 Providing Content Aware Enterprise Communication Services
  - 1 *Xiaotao Wu (Avaya Labs Research, US); K. Kishore Dhara (Avaya Labs Research, US); Venkatesh Krishnaswamy (Avaya Labs Research, US)*

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## Principles, Systems and Applications of IP Telecommunications

### 1 14:00 – 15:30 Industry talk session

- 1 Session Chairs: Eric Y. Chen (NTT Information Sharing Platform Laboratories, JP), Carol Davids (IIT, US)
- 1 An overview of ETSI standardisation activities in the Information Security arena with a focus on NGNs
  - 1 Carmine Rizzo, Technical Officer, ETSI Standardisation Projects
- 1 Simulating Realistic Metro-area Network Behavior
  - 1 Darius Minai-Azary, Product Manager, Empirix
- 1 Process-Based Security Testing in a Carrier Environment
  - 1 Sven Weizenegger, Lead of Security Testing and Senior Consultant, T-Systems; Heikki Kortti, Senior Security Specialist, Codenomicon
- 1 VoIP Security: Do Claims of Threats Justify Continued Research Efforts?
  - 1 Jonathan Zar, Pingalo, Inc; Eric Y. Chen, NTT Information Sharing Platform Laboratories

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### 1 15:30 – 18:00 Demo session

- 1 Session Chairs: Dorgham Sisalem (Tekelec, DE), Ali Fessi (University of Tuebingen, DE)
- 1 5 minutes presentation for each demo, demo show time with coffee break, Q&A time in the main conference room after demos
- 1 Advanced Structural Fingerprinting in SIP
  - 1 Humberto J. Abdelnur Radu State, Olivier Festor (INRIA)
- 1 Robustness Testing Of SIP, IMS and Of the Underlying IP Infrastructure
  - 1 Heikki Kortti (Codenomicon)
- 1 Protocol interactions among User Agents, Application Servers and Media Servers
  - 1 A. Amirante, T. Castaldi, L. Miniero and S. P. Romano (University of Napoli Federico II)
- 1 SOA-Type Service Composition With Reusable Telecommunications Components
  - 1 Ioannis Fikouras (Ericsson Research), Gregory W. Bond (AT&T Laboratories)
- 1 VoIP SEAL 2.0 Security Suite for SIP enabled networks
  - 1 Thilo Ewald, Nico d'Heureuse, Saverio Niccolini NEC Laboratories Europe)
- 1 On the deployment of Network Processors in Operational and Testing Network Devices
  - 1 Fabio Mustacchio, Federico Rossi, Francesco Lamonica (NetResults Srl); Andrea Di Pietro, Fabio Vitucci, Domenico Ficara (University of Pisa - Department of Information Engineering)
- 1 Vishing Prevention by Authenticated Display-name
  - 1 Stanley Chow, Christophe Gustave, Dmitri Vinokurov (Alcatel-Lucent, Bell Laboratories)

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## Best student paper award

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## Best student paper award

1 **SIP Server Overload Control: Design and Evaluation**

1 Charles Shen, Henning Schulzrinne (Columbia University), and Erich Nahum (IBM T.J. Watson Research Center)

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## Best student paper award

### 1 A SIP-based Programming Framework for Advanced Telephony Applications

1 Wilfried Jouve, Nicolas Palix, Charles Consel (INRIA / LaBRI), and Patrice Kadionik (IMS / University of Bordeaux)

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*See you all  
at IPTComm 2009*

J

