

# SecureComm 2006 Conference Program

**Conference venue:**

**Radisson Plaza Lord Baltimore, Baltimore, MD, USA**

\*The program schedule is tentative and is subject to change.

---

## DAY 1

---

### August 29, 2006 Morning

08:30 - 09:00 **Introduction**

09:00 - 10:00 **Keynote Talk: "An(other) Inconvenient Truth" by Charles Palmer**

10:00 - 10:15 **Coffee Break**

#### **10.15 - 12:00 Session 1: INTRUSION DETECTION and DoS**

**Session Chair: Bruno Crispo**

**A Flexible Approach to Intrusion Alert Anonymization and Correlation**

Dingbang Xu, Peng Ning

**An Intelligent Infrastructure Strategy to Improving the Performance and Detection Capability of Intrusion Detection Systems**

Emmanuel Hooper

**Framework for Identifying Compromised Nodes in Sensor Networks**

Qing Zhang, Ting Yu, Peng Ning

**Denial of Service Attacks and Defenses in Decentralized Trust Management**

Jiangtao Li, Ninghui Li, XiaoFeng Wang, Ting Yu

**12:00 - 01:30 Lunch**

### August 29, 2006 Afternoon

#### **01:30 - 03:15 Session 2: WORMS and VIRUSES**

**Session Chair: Ninghui Li**

**An Architecture for an Email Worm Prevention System**

Mohamed Taibah, Ehab Al-Shaer, Raouf Boutaba

**Distributed Stealthy Coordination Mechanism for Worm Synchronization**

Gaurav Kataria, Gaurav Anand, Rudolph Araujo, Ramayya Krishnan, Adrian Perrig

**Effective Detection of Active Worms with Varying Scan Rate**

Wei Yu, Xun Wang, Dong Xuan, David Lee

**On Mobile Viruses Exploiting Messaging and Bluetooth Services**

Abhijit Bose, Kang G. Shin

**03:15 - 03:30 Coffee Break**

#### **03:30 - 05:15 Session 3: AD HOC NETWORKS**

**Session Chair: Albert Levi**

**Discount Anonymous On Demand Routing for Mobile Ad hoc Networks**

Liu Yang, Markus Jakobsson, Susanne Wetzel

**In-Band Wormholes and Countermeasures in OLSR Networks**

Peter Kruus, Dan Sterne, Richard Gopaul, Michael Heyman, Brian Rivera, Peter Budulas, Brian Luu, Tommy Johnson, Natalie Ivanic, Geoff Lawler

**Detecting the Sybil Attack in Ad hoc Networks**

Chris Piro, Clay Shields, Brian N. Levine

**Enhancing Benign User Cooperation in the Presence of Malicious Adversaries in Ad Hoc Networks**

George Theodorakopoulos, John Baras

**August 29, 2006 Evening**

**07:00 - 09:00 Demo and Poster Session**

**Demos:**

**Mobipot**

Takehiro Takahashi

**Policy Machine Demonstration**

David Ferraiolo

**Bootstrapping for MIPv6**

Vishnu Ram

**Electromagnetic Signatures of WLAN Cards: Identification of Cards in the Presence of an Interferer**

Kate Remley and Bob Johnk

**PSELS: Practical Secure Email Lists Services**

Himanshu Khurana, Jin Heo and Meenal Pant

**Pvault: A Client Server System Providing Mobile Access to Personal Data**

Ravi Chandra Jammalamadaka, Sharad Mehrotra, Nalini Venkatasubramanian

**Physical Layer Information Assurance Enhancement Using Phased Arrays**

Joe Carey

**Posters:**

**Collaborative Location Certification for Sensor Networks**

Sol Lederer

**Physical Layer Information Assurance Enhancement Using Phased Arrays**

Joe Carey

**Enhancing Privacy Preservation of Anonymous Location Sampling Techniques in Traffic Monitoring Systems**

Baik Hoh, Marco Gruteser

**Security in Mobile Ad hoc Networks**

G.V.S.Raju

**A Centralized Group Rekeying Scheme for Secure Group Communication in Wireless Sensor**

## Networks

Yong Wang and Byrav Ramamurthy

---

### DAY 2

---

#### August 30, 2006 Morning

09:00 - 10:00 **Invited Talk: "We Need Assurance"** by Brian Snow

10:00 - 10:15 **Coffee Break**

#### 10:30 - 12:00 **Session 4: APPLIED CRYPTO + CODING**

**Session Chair: Susanne Wetzel**

##### **An Identity-based Ring Signature Scheme with Enhanced Privacy**

Chandana Gamage, Ben Gras, Bruno Crispo, Andrew Tanenbaum

##### **Implementation and Performance Evaluation of EAP-TLS-KS**

Jared Cordasco, Ulrike Meyer, Susanne Wetzel

##### **Provably Secure Ubiquitous Systems: Universally Composable RFID Authentication Protocols**

Mike Burmester, Tri van Le, Breno de Medeiros

##### **Packet coding for strong anonymity in ad hoc networks**

Imad Aad, Claude Castelluccia, Jean-Pierre Hubaux

**12:00 - 01:30 Lunch**

#### August 30, 2006 Afternoon

#### 01:30 - 03:15 **Session 5: MALICIOUS TRAFFIC**

**Session Chair: Gene Tsudik**

##### **Protecting Against Distributed Denial of Service (DDoS) Attacks Using Distributed Filtering**

Jonathan Trostle

##### **A Double Horizon Defense Design for Robust Regulation of Malicious Traffic**

Ying Xu, Roch Guerin

##### **TOPO: A Topology-aware Single Packet Attack Traceback Scheme**

Linfeng Zhang, Yong Guan

##### **On filtering of DDoS attacks based on source address prefixes**

Gary Pack, Jaeyoung Yoon, Eli Collins, Cristian Estan

**03:15 - 03:30 Coffee Break**

#### 03:30 - 05:15 **Session 6: Network Security I**

**Session Chair: Robert Deng**

##### **Preventing Cross Site Request Forgery Attacks**

Nenad Jovanovic, Christopher Kruegel, Engin Kirda

##### **DaTA -- Data Transparent Authentication without Communication Overhead**

Songqing Chen, Shiping Chen, Xinyuan Wang, Sushil Jajodia.

##### **Exploiting MMS Vulnerabilities to Stealthily Exhaust Mobile Phone's**

Battery Radmilo Racic, Denys Ma, Hao Chen

**MOBIWORP: Mitigation of the Wormhole Attack in Mobile Multihop Wireless Networks**

Issa Khalil, Saurabh Bagchi, Ness Shroff

**August 30, 2006 Evening**

**07:00 - 08:30 BANQUET**

---

**DAY 3**

---

**August 31, 2006 Morning**

08:30 - 10:00 **PANEL (PIR)**

**TITLE: Achieving Practical Private Information Retrieval**

**CHAIR: Radu Sion (SUNY Stony Brook)**

**PANELISTS: Aggelos Kiayias (Univ. of Connecticut), Giovanni Di Crescenzo (Telcordia), William Gasarch (Univ. of Maryland) and Moti Yung (RSA, Inc. and Columbia Univ.)**

10:00 - 10:15 **Coffee Break**

**10:15 - 12:00 Session 7: Network Security II**

**Session Chair: Roberto Di Pietro**

**Leveraging IPsec for Mandatory Access Control Across Systems**

Trent Jaeger, Dave King, Kevin Butler, Serge Hallyn, Joy Latten, Xiaolan Zhang

**Enabling Confidentiality in Content-Based Publish/Subscribe Infrastructures**

Costin Raiciu, David Rosenblum

**Non-Invasive Methods for Host Certification**

Patrick Traynor, Michael Chien, Scott Weaver, Boniface Hicks, Patrick McDaniel

**Secure Real-time User Preference Collection for Broadcast Scheduling**

Xuhua Ding, Shuhong Wang, Baihua Zheng

**12:00 - 01:00 Lunch**

**01:00 -02:45 Session 8: SENSOR and CELLULAR NETWORKS**

**Session Chair: Krishna Sivalingam**

**Message Dropping Attacks in Overlay Networks: Attack Detection and Attacker Identification**

Liang Xie, Sencun Zhu

**Sensor Networks that are Provably Secure**

Roberto Di Pietro, Luigi Mancini, Alessandro Mei, Jaikumar Radhakrishnan, Alessandro Panconesi

**Distributed Authentication of Program Integrity Verification in Wireless Sensor Networks**

Katharine Chang, Kang G. Shin

**Towards More Efficient Distance Bounding Protocols for Use in Sensor Networks**

Catherine Meadows, Paul Syverson, LiWu Chang

---

**THE END**

---

