

## First Breakout Session (Thursday Morning)

### Models for programming and verifying SDI

- **Anduo Wang:** *Software-Defined Networks as Databases*
- **KC Wang:** *How to Derive Abstraction for Software Defined Infrastructure and Software Defined Exchange*
- **Rick McGeer:** *Declarative Verifiable SDN Specification*
- **Theo Benson:** *Commoditizing the “S” in SDN with BareMetal Switching Infrastructure*
- Aditya Akella
- Dan Kilper
- James Chacko
- Joe Touch
- Mehrdad Moradi
- Srinivasan Seshan

### SDXes in practice (experience with SDX and SCI-DMZ deployments)

- **David Reese:** *Pacific Wave SDX*
- **Hyojoon Kim:** *ScienceDMZ and IPS Bypass*
- **Jerry Sobieski:** *Thoughts on Research Topics and Tools for Future Research*
- **Joe Mambretti:** *Next Generation Infrastructure Based on SDI, SDN, and SDX Architecture and Technologies*
- **Russ Clark:** *Software Defined Infrastructure in the AtlanticWave SDX*
- **Tom Lehman:** *Software Defined Exchange (SDX) and Software Defined ScienceDMZ (SD-SDMZ) Ecosystem*
- Arpit Gupta
- Balachander Krishnamurthy
- Bruce Patterson
- David Stern
- Haoyu Song
- Yang Guo

### Co-evolving applications and infrastructure

- **Bryan Larish:** *White Paper Response to Call for Participation: SDI/SDX Workshop*
- **Glenn Ricart:** *Whitepaper from Glenn Ricart*
- **Nagi Rao:** *Co-Designed SDIs for Computing and Physical Complexes Using Integrated Analytics*
- **Rudra Dutta (NCSU):** *Human-Network Interaction: the Weakest Link?*
- **Zhi-Li Zhang:** *Integrating Application-Aware Virtualized Network Functions in Software-Defined Infrastructure*
- Andy Bavier
- Ben Mack-Crane

- David Du
- Ibrahim Matta
- Madeleine Glick
- Mario Gerla
- Mike Zink
- Orran Krieger
- Raj Kettimuthu
- Rodrigo Fonseca
- Yan Luo

### **Connecting across domains (policies, resource brokering, etc.)**

- **Ilya Baldin:** *SDI Research Challenges and Opportunities*
- **John Moore:** *SDN Infrastructure Ecosystem*
- **Ken Calvert:** *Enhancing Network Services Through SDXs*
- **Malathi Veeraraghavan:** *Multi-domain, multi-layer software-defined infrastructure*
- **Mark Berman:** *Transforming Scientific Collaboration via Software-Defined Infrastructure*
- **S. J. Ben Yoo:** *A Market-Driven Broker Plane for Multi-Domain Software-Defined Infrastructures*
- Alvaro Cardenas
- Byrav Ramamurthy
- Cees de Laat
- Ethan Katz-Bassett
- Hongxin Hu
- Inder Monga
- James Griffioen
- John Wroclawski
- Marco Canini
- Munindar Singh
- Raj Jain
- Tilman Wolf
- Tim Talty
- Xenofontas Dimitropoulos

## Second Breakout Session (Thursday Afternoon)

### The future of programmable network hardware

- **Ben Mack-Crane:** *Understanding and Managing Change in an SDN*
- **Dan Kilper:** *Deep programmability for optical systems in the future Internet*
- **Haoyu Song:** *Open Programmable Data Path: Towards White Box 2.0*
- Balachander Krishnamurthy
- Bryan Larish
- David Stern
- Hyojoon Kim
- Jerry Sobieski
- Marco Canini
- Yang Guo

### SDI as a marketplace

- **Bruce Patterson:** *White Paper Response to Call for Participation: SDI/SDX Workshop*
- **Cees de Laat:** *The Service Provider Group Framework*
- **James Griffioen:** *SDXs as Resource Marketplaces*
- **Munindar Singh:** *Software-Defined Governance: Applying Computational Norms*
- **Tilman Wolf:** *Application for Participation in Software Defined Infrastructure / Software Defined Exchange Workshop*
- Glenn Ricart
- John Moore
- John Wroclawski
- Ken Calvert
- Orran Krieger
- Rodrigo Fonseca
- S. J. Ben Yoo

### Interconnecting different technologies: mobile, optical, and storage

- **David Du:** *Beyond the Internet: Convergence of Networking and Storage Becomes A Must*
- **James Chacko:** *Software-Defined Communication Testbed*
- **Madeleine Glick:** *Shaping and quality of service in SDN controlled hybrid optical/ electrical networks enabled by machine learning*
- **Mario Gerla:** *A wireless SDN inter exchange for mobile systems*
- **Tim Talty:** *The Role of Mobile Assets in Future Software Defined Infrastructure*
- Alvaro Cardenas
- Anduo Wang
- Hongxin Hu
- Joe Touch
- KC Wang

- Mark Berman
- Mehrdad Moradi
- Rudra Dutta (NCSU)
- Russ Clark

### **End-to-end: SDI across the wide area**

- **Aditya Akella:** *Toward end-to-end software defined QoE*
- **Byrav Ramamurthy:** *Balancing Exchange Points Communication and Inter-controller Communication for Inter-Domain Routing*
- **Inder Monga:** *End-to-end, multi-domain SDN with SDI bookends*
- **Srinivasan Seshan:** *Cooperation Between Control Planes*
- **Xenofontas Dimitropoulos:** *Stitching Inter-Domain Paths over LXPs*
- Andy Bavier
- Arpit Gupta
- David Reese
- Ethan Katz-Bassett
- Ibrahim Matta
- Ilya Baldin
- Joe Mambretti
- Malathi Veeraraghavan
- Mike Zink
- Nagi Rao
- Raj Jain
- Raj Kettimuthu
- Rick McGeer
- Theo Benson
- Tom Lehman
- Yan Luo
- Zhi-Li Zhang

## Third Breakout Session (Friday Morning)

### Measuring and Monitoring

- **Balachander Krishnamurthy:** *What we can learn from OpenFlow*
- **Mike Zink:** *White Paper for Software Defined Infrastructure / Software Defined Exchange Workshop*
- **Yan Luo:** *Challenges and Opportunities of Measurement for Future Software Defined Infrastructure*
- Ben Mack-Crane
- Cees de Laat
- Dan Kilper
- David Stern
- Nagi Rao
- Rudra Dutta (NCSU)
- Xenofontas Dimitropoulos

### SDXes and the Internet model (layering, the end-to-end argument, AS model, etc.)

- **Arpit Gupta:** *An Industrial-Scale Software Defined Internet Exchange Point*
- **Ethan Katz-Bassett:** *Real Internet Experiments for Future Internet Services*
- **Ibrahim Matta:** *BU submission*
- **Joe Touch:** *The role of state and layering in software-defined networking*
- **John Wroclawski:** *The Tiger Meets the Termite Mound: Toward Robust Inter-Domain SDN*
- Bruce Patterson
- Bryan Larish
- David Du
- Ken Calvert
- Marco Canini
- Srinivasan Seshan
- Tom Lehman

### Securing SDI

- **Alvaro Cardenas:** *Secure Software-Defined Federated Networks*
- **Hongxin Hu:** *Virtualizing and Utilizing Network Security Functions for Securing Software Defined Infrastructure*
- **Mehrdad Moradi:** *Exploring Security and Mobile Operator Use Cases for SDX*
- **Yang Guo:** *SDI Workshop*
- Byrav Ramamurthy
- David Reese
- Glenn Ricart
- Hyojoon Kim

- James Chacko
- James Griffioen
- Joe Mambretti
- John Moore
- Malathi Veeraraghavan
- Mario Gerla
- Munindar Singh
- Russ Clark
- Tilman Wolf
- Tim Talty

### **Virtualizing SDI in the datacenter and cloud**

- **Andy Bavier:** *CORD: Central Office Re-architected as a Datacenter*
- **Raj Jain:** *Software Defined Cloud Virtualization for Multi-Cloud Applications*
- **Raj Kettimuthu:** *Software Defined Infrastructure: Challenges and Opportunities*
- **Rodrigo Fonseca:** *Towards a Network Marketplace in a Cloud*
- Aditya Akella
- Anduo Wang
- Haoyu Song
- Ilya Baldin
- Inder Monga
- Jerry Sobieski
- KC Wang
- Madeleine Glick
- Mark Berman
- Orran Krieger
- Rick McGeer
- S. J. Ben Yoo
- Theo Benson
- Zhi-Li Zhang