Emerging Wireless Networks

Monday February 6, 2017

8:00–8:55 *Check-In/Light Breakfast (Hosted by IPAM)*

8:55–9:00 *Welcome and Opening Remarks*

9:00–9:50 **Christina Fragouli** (University of California, Los Angeles (UCLA))
Wireless network secrecy: building on erasures

10:00–10:35 *Break*

10:35–11:25 **Shyam Gollakota** (University of Washington)
Internet Connectivity for the Next Billion Devices

12:30–2:30 *Lunch (on your own)*

2:30–3:20 **Natasha Devroye** (University of Illinois at Chicago)
Removing and adding assumptions in network information theory

3:30–4:00 *Break*

4:00–4:50 **Syed Jafar** (University of California, Irvine (UCI))
Fundamental Limits of Robust Interference Management – An Information Theoretic Perspective

5:00–6:30 *Poster Session & Reception (Hosted by IPAM)*

Tuesday February 7, 2017

8:15–9:00 *Check-In/Breakfast (Hosted by IPAM)*

9:00–9:50 **Alejandro Ribeiro** (University of Pennsylvania)
High order methods in empirical risk minimization

10:00–10:15 *Break*

10:15–11:05 **Wotao Yin** (University of California, Los Angeles (UCLA))
Decentralized Optimization Algorithms under Asynchrony and Delays

11:15–11:30 *Break*

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11:30–12:20 **Gesualdo Scutari** (Purdue University)
In-network Nonconvex Large-scale Optimization

12:30–2:30 *Lunch (on your own)*

2:30–3:20 **John Smee** (Qualcomm)
Challenges and Design Aspects for 5G Wireless Networks

3:30–4:00 *Break*

4:00–4:50 **Michelle Effros** (California Institute of Technology)
On Cooperation and Capacity: Insights from the Edge

Wednesday February 8, 2017

8:15–9:00 *Check-In/Breakfast (Hosted by IPAM)*

9:00–9:50 **Ashutosh Sabharwal** (Rice University)
Massive MIMO Full-duplex: Theory and Experiments

10:00–10:15 *Break*

10:15–11:05 **Urs Niesen** (Qualcomm)
Degrees of Freedom of Cache-Aided Wireless Interference Networks

11:15–11:30 *Break*

11:30–12:20 **Venkat Anantharam** (University of California, Berkeley (UC Berkeley))
The value of resource sharing in wireless networks with restricted cooperation between the users.

12:30–2:30 *Lunch (on your own)*

2:30–3:20 **Ashish Khisti** (University of Toronto)
Error Control Coding for Real-Time Streaming Applications

3:30–4:00 *Break*

4:00–4:50 **Discussion Session**

Thursday February 9, 2017

8:15–9:00 *Check-In/Breakfast (Hosted by IPAM)*

9:00–9:50 **Daniela Tuninetti** (University of Illinois at Chicago)
Variations on the index coding problem

10:00–10:15 *Break*

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10:15–11:05 **Salman Avestimehr** (University of Southern California (USC))
Coded Distributed Computing and Its Application to Wireless Distributed Computing

11:15–11:30 *Break*

11:30–12:20 **P. Vijay Kumar** (Indian Institute of Science)
Recent Developments in Coding for Distributed Storage

12:30–2:30 *Lunch (on your own)*

2:30–3:20 **Matt Reynolds** (University of Washington)
Wireless Beyond Wi-Fi

3:30–4:00 *Break*

4:00–4:50 **Heather Zheng** (University of California, Santa Barbara (UCSB))
mmWave Networking and Beyond

Friday February 10, 2017

8:15–9:00 *Check-In/Breakfast (Hosted by IPAM)*

9:00–9:50 **Francois Baccelli** (University of Texas at Austin)
Stochastic Geometry and Dense Wireless Networks

10:00–10:15 *Break*

10:15–11:05 **Aylin Yener** (Pennsylvania State University)
Energy harvesting wireless networks: A new frontier for communication and information theory

11:15–11:30 *Break*

11:30–12:20 **Ayfer Özgur** (Stanford University)
Remotely Powered Communication

12:30–2:30 *Lunch (on your own)*

2:30–3:20 **Shlomo Shamai** (Technion - Israel Institute of Technology)
Fronthaul Constrained Cloud and Fog Radio Access Networks: An Information Theoretic View

3:30–4:00 *Break*

4:00–4:50 **Suhas Diggavi** (University of California, Los Angeles (UCLA))
Challenges and opportunities for emerging wireless networks