

The JTG / IEEE IT Society Summer School

in

Signal Processing, Communications, and
Networking

Summer school format

- Four days, two topics
- Each topic, each day: Two hours lecture + one hour discussion
- Student research presentations in discussion sessions
- Advanced, intense, primarily aimed at research students
- Material for 2009 - 2014 available on the web
 - <http://www.ee.iitm.ac.in/jtgsummerschool/>
 - <http://www.itsoc.org/jtg-school-2014/>

Past Summer Schools

- 2008 (Experimental, Zeroth), IIT Madras
 - Multiterminal information theory Rajesh Sundaresan
 - Network coding Andrew Thangaraj and Srikrishna Bhashyam
- 2009 (First), IISc Bangalore
 - New paradigms in processing large data sets Ravi Kannan and Amit Deshpande
 - Function computation D.Manjunath
- 2010 (Second), IISc Bangalore
 - Physical layer security Matthieu Bloch
 - Markov renewal processes and mean-field limits Anurag Kumar
- 2011 (Third): IIT Bombay
 - Statistical recovery problems in high dimensions Martin Wainwright
 - Optimising performance of wireless networks Prasanna Chaporkar
- 2012 (Fourth): IIT Bombay
 - Games and mechanisms for communication systems Bruce Hajek
 - Communication complexity Jaikumar Radhakrishnan
- 2013 (Fifth): IIT Madras
 - Random matrix theory and wireless networks Giuseppe Caire
 - Stochastic geometry for wireless networks Srikanth Iyer
- 2014 (Sixth): IIT Madras
 - Statistical physics methods in coding/info theory Pascal Vontobel
 - Mesoscopic perspective on network dynamics Sitabhra Sinha

JTG Summer School 2014

- Registration: INR 1000 (USD 20) students, INR 2000 others
- Participant profile: 95 registrations, well-attended
 - Students 75, Faculty 17, Others 3 (industry, research organisations)
 - Students mostly from IIT Bombay, IIT Madras, IISc, some from IIT Kanpur/Hyd, other engineering colleges.
 - One foreign participant (CUHK) apart from a speaker
 - 8 students talks of ½ hour each
- Sponsors:
 - IEEE Information Theory Society INR 6,00,000 = USD 10,000
 - COMSNETS Association INR 50,000
 - Microsoft Research India INR 50,000
 - Qualcomm INR 50,000
 - Registration INR 1,10,000
- Money used for air travel of foreign speaker, students travel, boarding and lodging, speakers honorarium, printed material, registration kits, transportation.
- Local organisation:
 - Andrew Thangaraj, Srikrishna Bhashyam, Radha Krishna Ganti, Krishna Jagannathan

Group Picture: Summer School 2014



Speaker Pictures: Summer School 2014



Plan for 2015

- Our summer school has found traction – seven years in a row. Maintain the momentum.
- 2015 plans: IISc Bangalore June/July 2015
 - High dimensional statistics – Yihong Wu
 - Multiterminal communication theory – Gerhard Kramer
- Timing: May/June/July, depending on anticipated local climate conditions, ISIT, ICC, WiOpt timings
- Organising committee: Chooses venue, topics, speakers
 - Srikrishna Bhashyam, Radhakrishna Ganti, Krishna Jagannathan, Andrew Thangaraj (IIT Madras)
 - Rajesh Sundaresan, Navin Kashyap (IISc)
 - Vinod Prabhakaran (TIFR Mumbai), Sibiraj Bhaskaran Pillai (IIT Bombay)
- Advisory group: JTG National Coordinator, IT Society President, Prakash Narayan, B. Sundar Rajan, P. Vijay Kumar, Vivek S. Borkar
 - Utter words of wisdom when requested

Budget for 2015 (in INR)

- Speaker travel: 300,000
- Honoraria: 100,000
- Speaker accommodations: 100,000
- Others accommodations: 200,000
- Food 300,000
- Arrangements, stationery 300,000

- Total: Rs. 1,300,000 ~ \$ 21,666

- Balance will be covered by registrations, local funding agencies (COMSNETS, Qualcomm, Microsoft Research).