The JTG / IEEE IT Society
Summer School
in
Signal Processing, Communications, and Networking
Proposal for 2015 school
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/
Past Summer Schools

- 2008 (Experimental, Zeroth), IIT Madras
  - Multiterminal information theory
  - Network coding
    Rajesh Sundaresan
    Andrew Thangaraj and Srikrishna Bhashyam

- 2009 (First), IISc Bangalore
  - New paradigms in processing large data sets
  - Function computation
    Ravi Kannan and Amit Deshpande
    D.Manjunath

- 2010 (Second), IISc Bangalore
  - Physical layer security
  - Markov renewal processes and mean-field limits
    Matthieu Bloch
    Anurag Kumar

- 2011 (Third): IIT Bombay
  - Statistical recovery problems in high dimensions
  - Optimising performance of wireless networks
    Martin Wainwright
    Prasanna Chaporkar

- 2012 (Fourth): IIT Bombay
  - Games and mechanisms for communication systems
  - Communication complexity
    Bruce Hajek
    Jaikumar Radhakrishnan

- 2013 (Fifth): IIT Madras
  - Random matrix theory and wireless networks
  - Stochastic geometry for wireless networks
    Giuseppe Caire
    Srikanth Iyer

- 2014 (Sixth): IIT Madras
  - Statistical physics methods in coding/info theory
  - Mesoscopic perspective on network dynamics
    Pascal Vontobel
    Sitabhra Sinha
JTG Summer School 2014

• Registration: INR 1000 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, Srikirshna Bhashyam, Radha Krishna Ganti, Krishna Jagannathan
Plan for 2015

• Speakers and topics:
  – Gerhard Kramer, *Multiterminal communication theory*
  – Yihong Wu, *High dimensional statistics*

• Timing: May/June/July, depending on anticipated local climate conditions, ISIT, ICC, WiOpt schedule, speaker availability

• Venue: Golden Jubilee Seminar Hall, ECE Dept., IISc Bangalore

• Organising committee: Chooses venue, topics, speakers, local arrangements
  – 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: 225,000
- Honoraria: 100,000
- Speaker accommodations: 25,000
- Others accommodations: 200,000
- Food: 275,000
- Arrangements, stationery: 200,000

- Total: Rs. 1,025,000 ~ $17,000

- Budget can be partially covered by registration fees, and support from local funding agencies (COMSNETS, Qualcomm, Microsoft Research).
Motion

We request the IEEE Information Theory Society to support the JTG/ITSoc Summer School 2015, by providing $11,500 in funds.