Communication Theory
Technical Committee
GLOBECOM Dec. 2014

Chair: Angel Lozano, UPF, Spain
Vice-Chair: Matthew Valenti, West Virginia University, USA
Secretary: Erik Perrins, University of Kansas, USA
Agenda

1. Brief Introductions (going around the room)

2. Approval of Minutes from 2014 IEEE ICC meeting (available at http://committees.comsoc.org/comt/)

3. Chair Remarks

4. Conference Reports:
   - CT Symposium, GC 2014 (P. Y. Kam)
   - CT Symposium, ICC 2015 (Tony Quek)
   - CT Symposium, GC 2015 (Octavia Dobre)

5. Workshop Reports:
   - CTW 2015 (Hamid Jafarkhani)
   - CTW 2016 (Constantinos Papadias)

6. CTTC Awards

7. Election of a New Chair
1. INTRODUCTIONS
2. APPROVAL OF MINUTES
FROM 2014 IEEE ICC MEETING
3. CHAIR REMARKS
Nominated 3 CTTC members for ComSoc Distinguished Lecturer (two men, one woman)
Best Readings is a collection of books, articles, and papers on a featured topic.
- Links to the source reference with short descriptions
- Helpful to those who want to acquire a background on the topic

Modeled after the old IEEE series of compendiums.

Published quarterly
- Each issue compiled by guest editors.
- Possibility to update content each year.

Current editor-in-chief is Len Cimini.
- Matt Valenti will begin as EiC in 2015.
Covers a wide range of topics spanning all of ComSoc

Topic should be mature enough such that there is sufficient interest, yet not so mature that there are many textbooks available.

Example topics
- Broadband Access
- Cognitive Radio
- Communications and Information Systems Security
- e-Health
- Green Communications
- Multi-Tier Cellular
- Power Line Communications
- Smart Grid Communications
Would like to have ~1 issue per year on a topic of interest to the Communication Theory community.

This month we will be posting an issue on massive MIMO (thanks Erik Larsson and Robert Heath).

Suggest topics to Matt --- better yet, let him know if you are interesting in serving as a guest editor.
● Time to update CTW Selection Committee
● Take the opportunity to “rethink” it

● Goals:
  ● Ensure continuity of current streak of great CTWs
  ● Remove the need for per-CTW advisory boards

● Proposition: change name to CTW Steering Committee and strengthen role:
  ● Repository of our collective experience
  ● Solicit compelling new CTW proposals
  ● Advice new organizers (CTW-specific advisory boards still possible, to advise on local matters, but no longer essential and preferably absent)
Proposition:

- 3-5 members (right now it’s 5)
- Presiding ex-officio for the 2-year term, a member of current CTTC cabinet. Alternatively, external chair appointed by CTTC chair (renewable for a second term).
- 2-4 other members chosen among recent CTTC chairs and recent CTW organizers. Appointed by CTTC chair and presiding member. Rotation of one member every 1-2 years.
- Formal proposal to be approved at next ICC

Comments?
4. CONFERENCE REPORTS

CT SYMPOSIUM
GC 2014 (P. Y. KAM)
Globecom 2014 Comm. Theory Symposium

- **Co-chairs**
  - Kaibin Huang (The University of Hong Kong)
  - Sennur Ulukus (University of Maryland)
  - Pooi-Yuen Kam (National University of Singapore)
- # TPC members = 147, # submissions = 150
- Acceptance rate is about 40% (60 accepted papers)
- # sessions = 9 Oral + 1 Interactive (6 papers each)
- 7 papers nominated for “Best of Globecom” poster session (candidates for Best Paper Awards)
4. CONFERENCE REPORTS

CT SYMPOSIUM
ICC 2015 (TONY QUEK)
ICC 2015 Communication Theory
Symposium Update

- Location: London, UK  
  Period: June 8-12, 2015

- Co-chairs
  - Tony Quek (Singapore Univ. of Technology and Design, Singapore)
  - Meixia Tao (Shanghai Jiao Tong University, China)
  - Haesik Kim (VTT, Finland)

- Number of TPC members = 188

- Total number of submissions = 225
  - Europe = 40%
  - China = 19%
  - USA & Canada = 18%
  - Australia & Asia = 15%
  - Others = 8%

- Other Issues
  - Delay in reviews due to extensions (Oct 15)
4. CONFERENCE REPORTS

CT SYMPOSIUM
GC 2015 (OCTAVIA DOBRE)
Globecom 2015 Communications Theory Symposium

- Co-Chairs:
  - Octavia Dobre, Memorial University, Canada
  - Xiang Cheng, Peking University, China
  - Kaushik Chakraborty, Qualcomm Inc., USA

- CFP: Submitted to the TPC Chair (Ramesh Rao, UCSD), along with a list of potential TPC members (227).

- Hard deadline for paper submission: April 1, 2015.
5. WORKSHOP REPORTS

CTW 2015 (HAMID JAFARKHANI)
Location - Southern California

Dana Point is by the ocean in Orange County, one hour south of Los Angeles and one hour north of San Diego.

Southern California is a major tourist destination with great weather in May.

Distance from airports

<table>
<thead>
<tr>
<th>Airport</th>
<th>Code</th>
<th>Miles from Hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Wayne Orange County airport</td>
<td>SNA</td>
<td>24</td>
</tr>
<tr>
<td>Long Beach airport</td>
<td>LGB</td>
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<td>60</td>
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<tr>
<td>Ontario airport</td>
<td>ONT</td>
<td>60</td>
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</tbody>
</table>
Nearby activities

- Near the hotel: whale watching, fishing, jet skiing, sailing, and golf
- Doheny State Park, featuring miles of pathways for biking, walking, and jogging
- Laguna Beach with its restaurants and cultural activities is 15 minutes away
- Disneyland is 35 minutes away
- Legoland is 35 minutes away
- Seaworld and San Diego zoo are 60 minutes away
- Universal Studios 70 minutes away
- Los Angeles is 60 minutes away
Venue: Laguna Cliffs Marriott Resort and Spa

- The resort is on a hill with Ocean view. It is 5 minutes walking from the beach and Dana point harbor with Ocean activities.
- Rooms: $200/night (+10.065% and $3 nightly tax),
- No resort fee, Wifi included in the guest rooms
- Parking: $32/night
- This hotel has a smoke-free policy
More pictures
Hotel location
Dates

Poster Submission: 16 Feb 2015
Poster Notification: 1 Mar 2015
Advance Registration: 15 Mar 2015

CTW: 10-13 May 2015

ICC, 8-12 June 2015, London
ICASSP, 19-24 April 2015, Australia
ISIT, 14-19 June 2015, Hong Kong
Organizing Committee

- **General Chair**
  - Hamid Jafarkhani (University of California, Irvine)
- **Technical Program Chair**
  - Syed Jafar (University of California, Irvine)
- **Poster Co-Chairs**
  - Bobak Nazer (Boston University)
  - Ayfer Ozgur (Stanford University)
- **Publicity Co-Chairs**
  - Aria Nosratinia (University of Texas at Dallas)
  - David Gesbert (EURECOM)
- **Advisory Board**
  - Jeff Andrews (University of Texas at Austin)
  - Andrea Goldsmith (Stanford University)
  - Angel Lozano (Universitat Pompeu Fabra (UPF))
  - Leszek Szczecinski (INRS)
Technical Program

- Sun, May 10
  - Welcome Reception, Registration
- Mon, May 11
  - Plenary, 2 Sessions, 1 Panel, Poster (Cocktails)
- Tue, May 12
  - Plenary, 2 Sessions, 1 Panel, Banquet
- Wed, May 13
  - Plenary, 1 Session
Mon, May 11

- 8:15 - 8:30 Opening Address
- 8:30 - 9:30 PLENARY 1
- 9:30 - 10:00 Coffee Break
- 10:00 - 12:20 SESSION 1: 5G (Gerhard Wunder & Gerhard Fettweis TU)
- 12:30 - 14:00 Lunch
- 14:00 - 15:55 SESSION 2: Heterogeneous Wireless Networks (Michael Honig & Randall Berry)
- 16:00 - 16:30 Refreshment Break
- 16:30 - 18:00 PANEL 1: Future Trends in the Wireless Communications Industry (Jeff Andrews & Robert Heath)
- 18:30 - 20:00 Poster Session + Cocktails
Tue, May 12

- 8:30 - 10:00  PANEL 2: Applications of Communication Theory in Other Fields (Ender Ayanoglu & Anna Scaglione)
- 10:00 - 10:30 Coffee Break
- 10:30 - 12:25 SESSION 3: Energy Harvesting in Wireless Communications (Aylin Yener & Jing Yang)
- 12:30 - 14:00 Lunch
- 14:00 - 15:00 PLENARY 2
- 15:00 - 15:30 Refreshment Break
- 15:30 - 17:50 SESSION 4: Multiuser Communication with Channel Uncertainty (David Gesbert & Sennur Ulukus)
- 18:30 - 21:00 Banquet
Wed, May 13

- 8:30 - 9:30 PLENARY 3
- 9:30 - 10:00 Coffee Break
- 10:00 - 12:20 SESSION 5: Index Coding, Caching and Distributed Storage (Salim ElRouayheb & Mohammad-Ali Maddah-Ali)
Comments to

- Hamid Jafarkhani, <hamidj@uci.edu>
- Syed Jafar, <syed@uci.edu>
5. WORKSHOP REPORTS

CTW 2016 PROPOSAL (CONSTANTINOS PAPADIAS)
Communication Theory Workshop 2016

Marios Kountouris (SUPELEC, France)

Constantinos Papadias (AIT, Greece)
Our Vision

- Past CTW (2004 – 2014)
  - America: 8 times (+1 in 2015)
  - Europe: 2 times
  - Asia: 1 time

- Europe:
  - 1 in an Island (2004)
  - 1 in Continental (2011)

We propose to bring CTW back to Europe in 2016
Updated Info & Context

- Santorini is undebatably a magnificent island with spectacular views

**BUT**

- There is no resort/hotel for more than 40-50 people next to the conference center
- Attendees would have to stay in different hotels (5-10mins walk), which will break the spirit and ambiance of CTW
- Prices are quite high (budget wise it’s risky)
- The same applies to other popular islands in the Aegean sea (e.g. Mykonos, Paros, …)
Proposed Location

Nafplio, Greece
Nafplio

Old Castle

Typical street in the Old Town

Main Square
A bit more about Nafplio

- A seaport town in the Peloponnese with rich history (from Antiquity till …).
  Most of the old town is on a peninsula jutting into the gulf.

- One of Greece’s most beautiful and picturesque towns.
  “Nafplio is one of Greece’s prettiest and most romantic towns. It occupies a
  knockout location – on a small port beneath the towering Palamidi fortress – and
  is graced with attractive narrow streets, elegant Venetian houses, neoclassical
  mansions and interesting museums.” (Lonely Planet)

- Capital of the First Hellenic Republic, from the start of the Greek Revolution in
  1821 until 1834.

- Spectacular views (hotel has views over the bay and the old town).

- Close to many nearby ancient sites (Mycenae, Epidaurus and Olympia).

- Close to islands (full-day trips to Spetses and Hydra).

- There 4-5 beaches plus a nice beach offering all kinds of facilities in Tolo, only
  15 min away from the town.
A taste of …

Hydra island

Epidaurus

Mycenae

Hydra island

Olympia
Potential Dates

- Conferences in 2016
  - ICASSP: March 21-26 (Shanghai, China)
  - ICC: May 23-27 (Kuala Lumpur, Malaysia)
  - ISIT: July 10-15 in Barcelona, Spain
  - SPAWC: usually June (TBA)
  - VTC Spring: usually mid May (Nanjing, China)

- Proposed dates
  - May 15 – 18, 2016 (“usual” date of past events)
  - May 29 – June 1, 2016
The Team

- General Co-Chairs
  Marios Kountouris (SUPELEC, France)
  Constantinos Papadias (AIT, Greece)

- Fundraising Chair
  Tony Q.S. Quek (SUTD, Singapore)

The rest of the Team is under construction, but we will keep the “standard” structure with the following positions:

- Technical Program Co-Chairs
- Finance Chair
- Poster Chairs
- Publicity Chairs
- Local Organization Co-Chairs
- Advisory Board
Additional Information

- The weather is excellent in May
  - 22°C (71°F) on average

- Easy VISA procedure (no VISA required for USA, Europe, Israel, Singapore, Korea, Japan, Australia, etc)

- Many gems to visit in Nafplio and around
  - Old town with historic buildings, nice architecture
  - Castle (216m above sea) with spectacular view
  - Venetian small fortress (Bourtzi)
  - Akronafplia (historic rock at the foot of the hill), ideal for hiking
Workshop Venue

- Nafplia Palace Hotel
  - Conference Room
    (135 m², max. 150 participants, AC, daylight)
  - Room theatre style
  - Open air space, posters area
Possible Accommodation

- Rooms with **sea view** at Nafplia Palace Hotel (5*)

- American breakfast

- Prices (standard rooms):
  - Double occupancy
    - 160 euros ($200) / night
  - Single occupancy
    - 150 euros ($185) / night
Travel to Nafplio

New York: 10 hours, 13 hours
San Francisco: 14 hours
Paris: 3 hours
Frankfurt: 3 hours
Seoul: 13 hours
Tokyo: 20 hours
Hong Kong: 13 hours
Barcelona: 3 hours
Austin: 13 hours
Sydney: 3 hours
Technical Program

- Five half days
- 3 Plenary speakers
- All invited lectures (~35 speakers)
- 2 Panels
- Hot topics poster session (non-invited)
- Special Sessions on hot & active research topics in comm. theory + emerging areas (social networks, molecular communications, etc).
Financial Support Possibilities

- IEEE ComSoc
- NSF
- Huawei
- Qualcomm
- Alcatel Lucent Bell Labs
- Intracom
- ...
Questions?
6. CTTC AWARDS
CTTC Awards Committee

Matthew Valenti, Chair

Riccardo Raheli

Daniela Tuninetti

Robert Heath

Jack Winters
Outstanding Service Award

- Recognizes members of the CTTC who have a distinguished record of service to the communication theory community, including CTTC-sponsored symposia and workshop organization, leadership roles within the committee, and promoting committee activities and interests in the broader research community.

- Past recipients:
  - 2013: Michael Rice
  - 2012: Costas Georghiades
  - 2011: Len Cimini
  - 2010: Richard Gitlin and Larry Milstein
  - 2009: Ray Pickholtz an Zeke Bar-Ness
Outstanding Service Award

Ender Ayanoglu
Professor
University of California, Irvine

For leadership and innovation as CTTC chair and editor-in-chief for the IEEE Transactions on Communications.
Technical Achievement Award

- Recognizes members of the CTTC who have been involved with the committee, have done outstanding work in communication theory, and have achieved a high degree of visibility in the field.

- Past recipients:
  - 2013 Andrea Goldsmith
  - 2012 Larry Milstein
  - 2011 Sergio Benedetto
  - 2010 Gerald Foschini and Dariush Divsalar
Reinaldo Valenzuela
Wireless Research Director
Distinguished M. of Staff
Alcatel-Lucent Bell Labs

For fundamental work on wireless channel modeling and MIMO communication systems.
Technical Achievement Award 2/2

Norm Beaulieu

For fundamental work on the analysis of fading channels and diversity systems.
6. ELECTION OF A NEW CHAIR
**ELECTION & VOTING**

- **Election:** The election of a new chair is to be administered by the CTTC Chair and is to take place at a general meeting of the CTTC (normally during Globecom). In the event that the current CTTC Chair has been nominated to continue in that position, then the election will be administered by the Vice Chair. The chair of the N&E Committee will present its nominee to the members present at the meeting. At that time, nominations will also be accepted from the floor. Any nominees brought forth at the meeting must meet the criteria for holding the Chair position. That is, they must be Active Members of the CTTC who have consented to the nomination and have indicated a willingness to serve if elected. All nominees must be present at the CTTC meeting where the election occurs.

- **Voting for the CTTC Chair:** Once nominations have been completed, the CTTC Chair candidates will then leave the room to allow discussion of candidates and to permit a vote. To vote, one must be an Active Member of the CTTC and must be present at the CTTC meeting. In the case of one or two candidates, election is by a simple majority of the voting members present at the election. Voting will be conducted through a simple show of hands unless a secret ballot is requested. In the case of two candidates for the position, election is by simple majority of the voting members present at the election. For the case of more than two candidates, selection will take place in two stages. In the first stage votes can be cast for all nominated candidates. In the second stage, votes can be cast only for the two candidates who have garnered the most votes in the first stage; simple majority rule shall apply. In the event of a tie, votes shall be cast one more time. If the tie is not broken, the VPTA shall cast a tie-breaking vote.