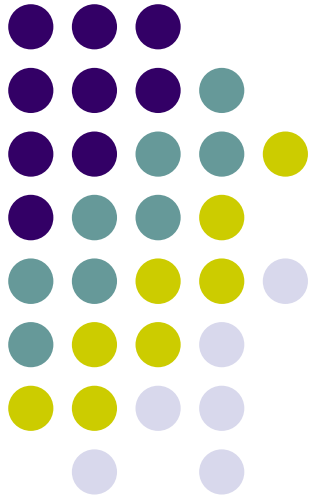
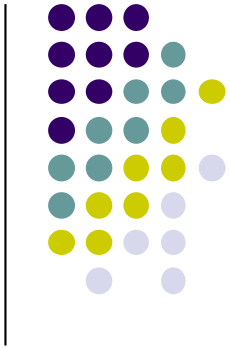
Communication Theory Technical Committee

GLOBECOM Dec. 2013

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 2013 IEEE ICC meeting (available at http://committees.comsoc.org/comt/)

3. Chair Remarks

4. Conference Reports:
   - CT Symposium, GC 2013 (Matthew Valenti)
   - CT Symposium, ICC 2014 (Fulvio Babich)
   - CT Symposium, GC 2014 (Pooi-Yuen Kam)

5. Workshop Reports:
   - CTW 2013 (Angel Lozano)
   - CTW 2014 (Lescek Szczecinski, Wei Yu)
   - CTW 2015 (Hamid Jafarkhani, Syed Jafar)

6. CTTC Awards

7. Other Items

1. INTRODUCTIONS

2. APPROVAL OF MINUTES FROM 2013 IEEE ICC MEETING

3. CHAIR REMARKS

- Audit process completed: CTTC recertified with flying colors
  - Our level of activity is commended
  - Only some very minor issues related to our web

- Recall:
  - Recurring issue: CTW listed as underperforming. (On basis of financial rather than technical arguments, and also because of lack of satisfaction surveys.)
  - We asked you to help turn this around to the eyes of ComSoc…

- …and you have. Thank-you!
- 47 respondents to the CTW’13 satisfaction survey, largely enthusiastic.

Survey Name: **CTW 2013 Workshop Eval**

Track Messages

Track Surveys

Track Deliverability

Survey Report

Total Respondents: 47

First Date Submitted	07/02/2013 Tuesday
Last Date Submitted	07/18/2013 Thursday

Question 1

How do you rate the overall workshop?

	Responses		
Excellent	37		77%
Above Average	11		23%
Average	0		0%
Less than Average	0		0%
Poor	0		0%

Total Respondents:	47
Did Not Answer:	0

Question 3

How do you rate the technical content?

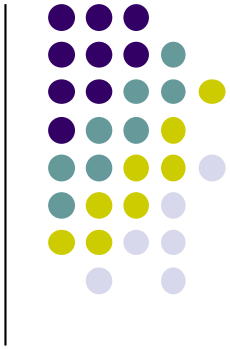
	Excellent	Above Average	Average	Less than Average	Poor	I did not attend	Total
Technical Sessons	40	8	0	0	0	0	48
Poster Sessions	22	18	5	1	0	2	48
Panels	38	7	2	1	0	0	48

Total Respondents:	47
Did Not Answer:	0

Question 4

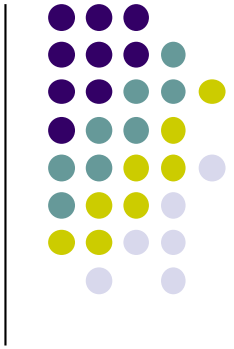
How do you rate the following conference components?

	Excellent	Above Average	Average	Less than Average	Poor	Not applicable	Total
Food & Beverage	42	4	1	0	1	0	48
Workshop Logistics	38	6	4	0	0	0	48
Location (Phuket, Thailand)	37	7	3	1	0	0	48
Meeting Facility	33	12	2	1	0	0	48
Welcome Reception	40	6	0	0	0	2	48
Workshop Banquet	38	7	2	0	0	1	48
Continental Breakfasts	41	5	0	0	0	2	48
Lunches	41	6	0	0	1	0	48



- Selected Comments:
  - *"Stick with the current approach of inviting the best people in the area to discuss topics of emerging interest in communications. The current format of invited presentations and panels works really well. This workshop has the most fruitful technical discussions of any that I attend"*
  - *"It would be great if you could diversify the topics"*
  - *"Emerging technologies in communications such as nano networks"*
  - *"Fewer talks"*
  - *"If anything, the technical program was too packed, and sessions ran long, resulting in a very long day (8:30am to 7pm)"*

- Selected Comments:
  - *“How about going to the Alps?”*



- 4 ComSoc Distinguished Lecturer Nominations

- Interest in chairing an ICC/GC symposium?
  - Volunteers sought
  - Waiting list
  - Contact Angel/Matt/Erik

4. CONFERENCE REPORTS

CT SYMPOSIUM
GC 2013 (MATTHEW VALENTI)

GC'13 Communication Theory Symposium Report

Co-Chairs (Nominating TC in parenthesis):

Nallanathan Arumugam, King's College London, UK (SPCE,RC)

Sang Wu Kim, Iowa State University, USA (CT)

Lian Zhao, Ryerson University, Canada (WC)

Submissions: 136

Review process:

127 TPC members, each paper allocated to 4 reviewers

51 papers with 3 reviews, 84 papers with 4 reviews, 1 with 5 reviews

Score statistics:

59 @ 3.4 or higher, 51 @ 3.5 or higher, 41 @ 3.6 or higher

Acceptances: Accepted 50, for a 36.7% acceptance rate.

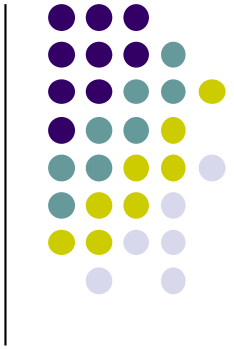
10 sessions (including one poster session) of 5 papers

4. CONFERENCE REPORTS

CT SYMPOSIUM
ICC 2014 (FULVIO BABICH)

- When: 16 - 20 June 2014
- Where: Sydney, Australia
  - Co-chairs:

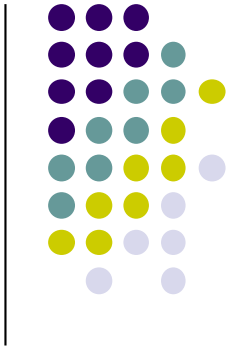
Fulvio Babich, Univ. of Trieste, Italy
Bechir Hamdaoui, Oregon State Univ, USA
Huaiyu Dai, North Carolina State Univ. USA



- TPC members: 159
- Reviewed papers: 141
- Average reviews (for paper): 3.5 (provisional)
- Max. number of reviews (for TPC member): 5
- Average score (for paper): 3.3 (provisional)
- Acceptance ratio: not specified yet.

4. CONFERENCE REPORTS

CT SYMPOSIUM
GC 2014 (POOI-YUEN KAM)



- Co-chairs
  - Kaibin Huang (the University of Hong Kong)
  - Sennur Ulukus (the University of Maryland)
  - Pooi-Yuen Kam (National University of Singapore)
- TPC statistics
  - # of members = **146**
  - Expected # of submissions = **250**
  - Expected # of reviews per member = **5-6**
- Submission deadlines
  - Submission: **April 1, 2014**
  - Acceptance notification: **July 1, 2014**
  - Camera ready submission: **August 8, 2014**

5. WORKSHOP REPORTS

CTW 2013 (ANGEL LOZANO)

June 23-26, 2013, Katathani Hotel, Phuket, Thailand

90+ participants

5 Plenary talks

- Christopher Rose
- Raymond Yeung
- Gerhard Fettweis
- Jilei Hou
- Matthias Grossglauser

5 Special sessions

- Interference networks
- Energy efficient radio networks
- Massive MIMO
- Feedback communications
- Dynamic Self-Optimization in wireless networks

2 Panels

- Is millimeter wave communication a hype or the future ?
- Will future wireless systems be cooperative, massive or messy ?

1 Poster session

IEEE CTW 2013 - Final budget (Mid-Oct 2013)

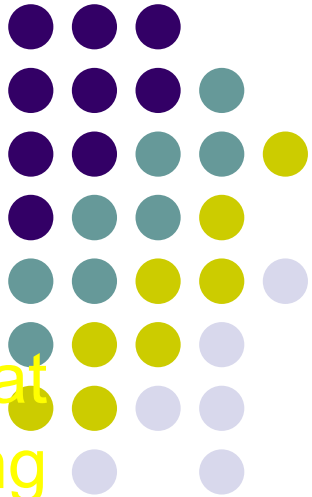
- **Income**
  - Registration **30,511.92 USD**
  - Sponsors **29,547.99 USD**
  - Interests **36.48 USD**
- **Expenses**
  - Local arrangements **3,131.15 USD**
  - Food and beverages **37,978.19 USD**
  - Honorarium **2,000 USD**
  - Misc fees **1,386.73 USD**
- **Net income 15,601.32 USD**

5. WORKSHOP REPORTS

CTW 2014 (LESZEK SZCZECINSKI, WEI YU)

CTW 2014

http://www.ieee-ctw.org/



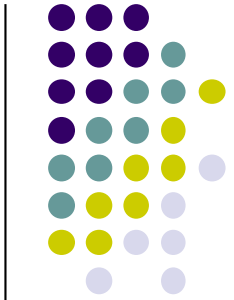
Presented at
CTTC meeting

December 10, 2013

Location

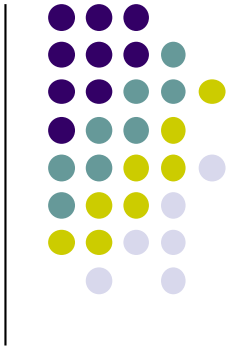
Curaçao (Netherlands Antilles)

Why Curaçao?



- Subtropical climate; outside the hurricane belt; temperatures in May: 25-35 C (78-95 F)
- Medium-range prices
- High living standard
- Mix of cultures and history (Willemstad :UNESCO World Heritage city)
- Perfect for beach and water sports, snorkeling, diving; + meet the dolphins

Dates



- **25-28 May 2014**
- Closest conferences
  - VTC Spring: 18-21 May 2014
  - ICC: 10-14 June 2014
- Not overlapping with
  - ICASSP, ISIT, ITW, SPAWC

Travel to Curaçao (CUR)

Origin	Stops	Flight Time	'Optimized' $$$
Miami	**0**	**3h**	**350$**
Amsterdam	**0**	**9h**	**900$**
Edmonton	2	11h	1000$
Toronto/Montreal	1	8h	700$
Houston	1	7h	550$
San Francisco	1	11h	700$
New York	1	7h	500$
Paris	1	16h,	1250$
London	1	14h	1200$
Frankfurt	2	19h	1300$
Tokyo	2	27h	3300$

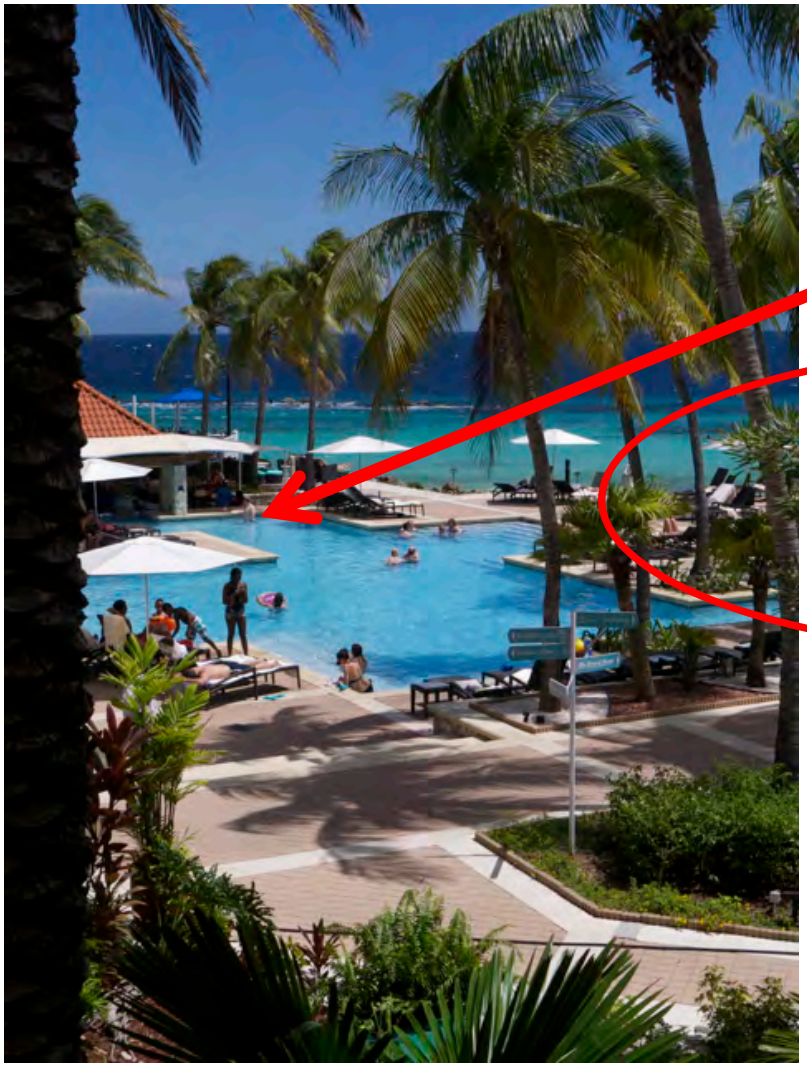
Organizing Committee

- General Chair:
  - Leszek Szczecinski, INRS
- Technical Program Co-Chairs
  - Witold Krzymien (University of Alberta)
  - Wei Yu (University of Toronto)
- Poster Session Chairs
  - Bruno Clerckx (Imperial College)
  - Petar Popovski (Aalborg University)
- Publicity Co-Chairs
  - Alex Alvarado (University of Cambridge)
  - Natasha Devroye (University of Illinois)
- Advisory Board
  - Jeff Andrews (University of Texas at Austin)
  - David Gesbert (EURECOM)
  - Robert Heath (University of Texas at Austin)
  - Michael Honig (Northwestern University)
  - Anthony CK Soong (Huawei)
  - Reinaldo Valenzuela (Alcatel – Lucent)

Venue: Marriott Beach Resort

- Close to Willemstad, 15 mins to the airport, 4 stars at tripadvisor.com, private beach, reef @ 20m
- rooms starting $129/nt (+ tx/tips)

Suggested Area for Banquet

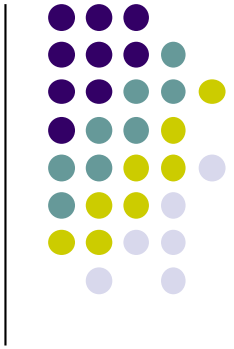


Band can play here

Banquet here

Banquet would overlook the pool and be next to the beach, great location, they can do rounds have 100+ people

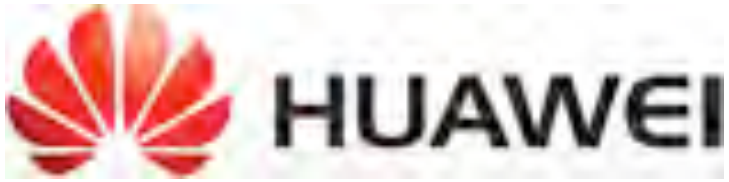
Technical Sessions



- Heterogeneous Networks
  - Jeff Andrews, Amitav Ghosh
- Massive MIMO
  - Alexei Ashikhmin, Giuseppe Caire
- Interference Management
  - Elza Erkip, Behnaam Aazhang
- Full Duplex Wireless
  - Ashu Sabharwal
- Cross-layer Design for Data Communications
  - Andy Molisch

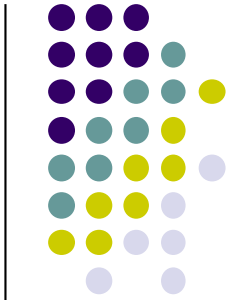
Industrial Sponsors

- Keynote Sponsor:
  - Huawei Technologies
    (to be confirmed)



- Gold Sponsor:
  - Alcatel-Lucent

Keynotes and Panels



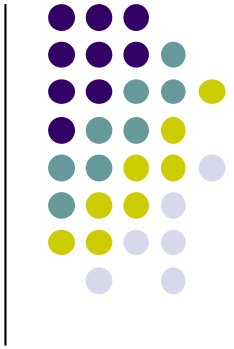
- Keynotes:
  - Peiying Zhu (Huawei, To be confirmed)

    Evolution Toward 5G
  - Reinaldo Valenzuela (Alcatel-Lucent)

    Interference Management in Cellular HetNets

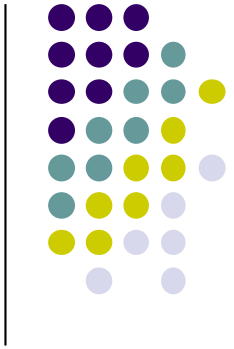
- Panel
  - Big Data for Communications
  - Machine-to-Machine Communications

Daily Schedule



- 8:30-9:30: Plenary
- 9:30-9:45: Coffee break
- 9:45-10:00: Overview
- 10:00-12:00: Session (4 talks)
- 12:00-14:00: Lunch
- 14:00-14:15: Overview
- 14:15-16:15: Session (4 talks)
- 16:15-16:30: Coffee break
- 16:30-18:00: Panel

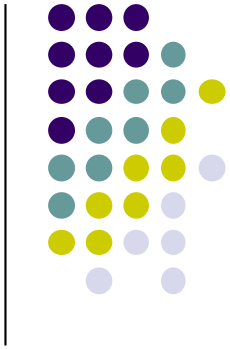
Registration



- We intend to keep the registration fee same as in previous years:

	Advance	On-site
ComSoc Member	$400	$450
IEEE Member	$425	$475
Non-Member	$500	$500
Student	$300	$350

Important Dates



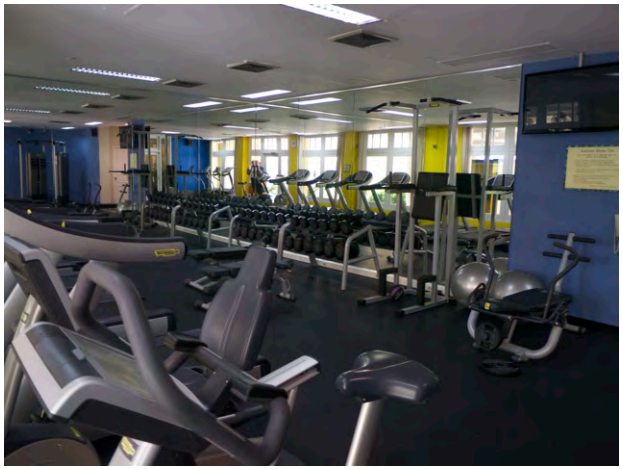
- Poster Submission:
  - March 1, 2014
- Advance Registration
  - April 1, 2014
- Workshop
  - May 25-28, 2014

Some pictures

Some pictures

Some pictures

Photos by Robert Heath



Scuba Diving on Curacao

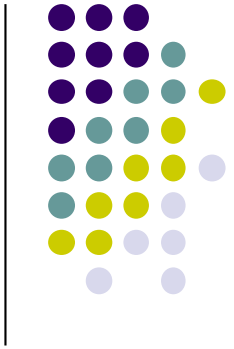
Some of the best diving is here (hard and soft coral)

One great wreck dive is the Superior, near the hotel, a bit deep at 100ft

Tugboat is also a nice wreck, very shallow at 15ft

Shore diving is possible in many places, boat preferred in a few spots
Useful to have a guide for some sites

Comments to



- Leszek Szczecinski, <leszek@emt.inrs.ca>
- Witold Krzymien, <wak@ece.ualberta.ca>
- Wei Yu, <weiyu@comm.utoronto.ca>

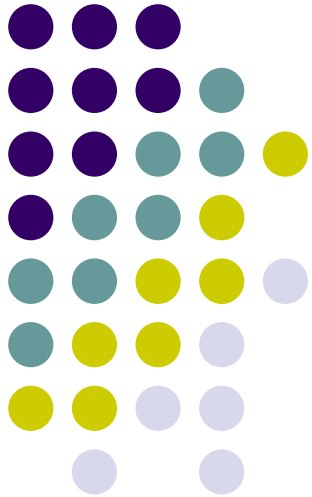
5. WORKSHOP REPORTS

CTW 2015 PROPOSAL (HAMID JAFARKHANI, SYED JAFAR)

CTW 2015

Presented at
CTTC meeting

Dec 10, 2013



Location - Southern California

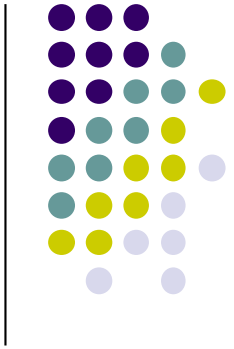
Dana Point is by the ocean in Orange county, one hour south of Los Angeles and one hour north of San Diego.

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

Distance from airports

Airport	Code	Miles from Hotel
John Wayne Orange county airport	SNA	24
Long Beach airport	LGB	45
Los Angeles airport	LAX	60
San Diego airport	SAN	60
Ontario airport	ONT	60

Nearby activities

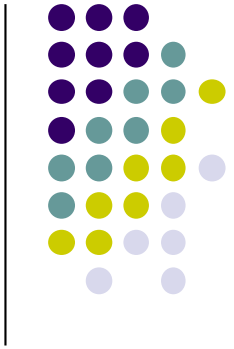


- Near the hotel: whale watching, fishing, jet skiing, sailing, and golf
- Doheny State Park, featuring miles of pathways for biking, walking, and jogging
- Laguna Beach with its restaurants and cultural activities is 15 minutes away
- Disneyland is 35 minutes away
- Lego land is 35 minutes away
- Sea world 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

Dates



- **The only available dates in the hotel are 10-12 May 2015**

Any conflict with other conferences?

ICC, June 2015, London

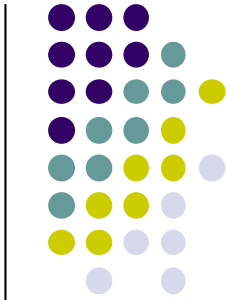
ICASSP, 19-24 April 2015, Australia

ISIT, 14-19 June 2015, Hong Kong

More pictures

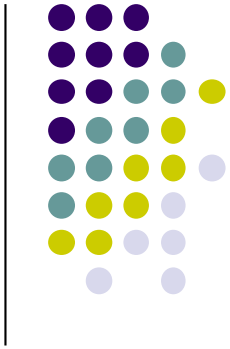
Hotel location

Organizing Committee



- General Chair:
  - Hamid Jafarkhani (University of California, Irvine)
- Technical Program Chair
  - Syed Jafar (University of California, Irvine)
- Entertainment Co-Chairs
  - Volunteers ?
- Tentative Advisory Board
  - Jeff Andrews (University of Texas at Austin)
  - Angel Lozano (Universitat Pompeu Fabra (UPF))
  - Andrea Goldsmith (Stanford University)
  - …

Comments to



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

6. CTTC AWARDS

CTTC Awards Committee

Matthew Valenti, Chair

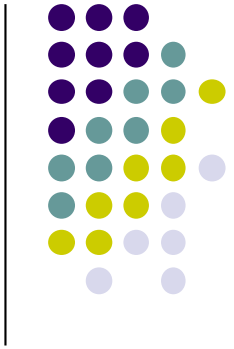
Robert Heath

Daniela Tuninetti

Riccardo Raheli

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:
  - 2012: Costas Georghiades
  - 2011: Len Cimini
  - 2010: Richard Gitlin and Larry Milstein
  - 2009: Ray Pickholtz an Zeke Bar-Ness

Outstanding Service Award

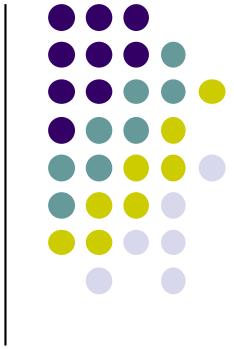
Michael Rice

Jim Abrams Professor

Brigham Young University

"for his continuous involvement in and sustained leadership of the Communication Theory Technical Committee"

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:
  - 2012 Larry Milstein
  - 2011 Sergio Benedetto
  - 2010 Gerald Foschini and Dariush Divsalar

Technical Achievement Award

Andrea Goldsmith

Stephen Harris Professor

Stanford University

"for contributions to the analysis of fundamental performance limits for wireless channels and networks"

7. OTHER ITEMS