



SIGCOMM 2018
BUDAPEST

Welcome!



Sergey Gorinsky
IMDEA Networks Institute,
Spain

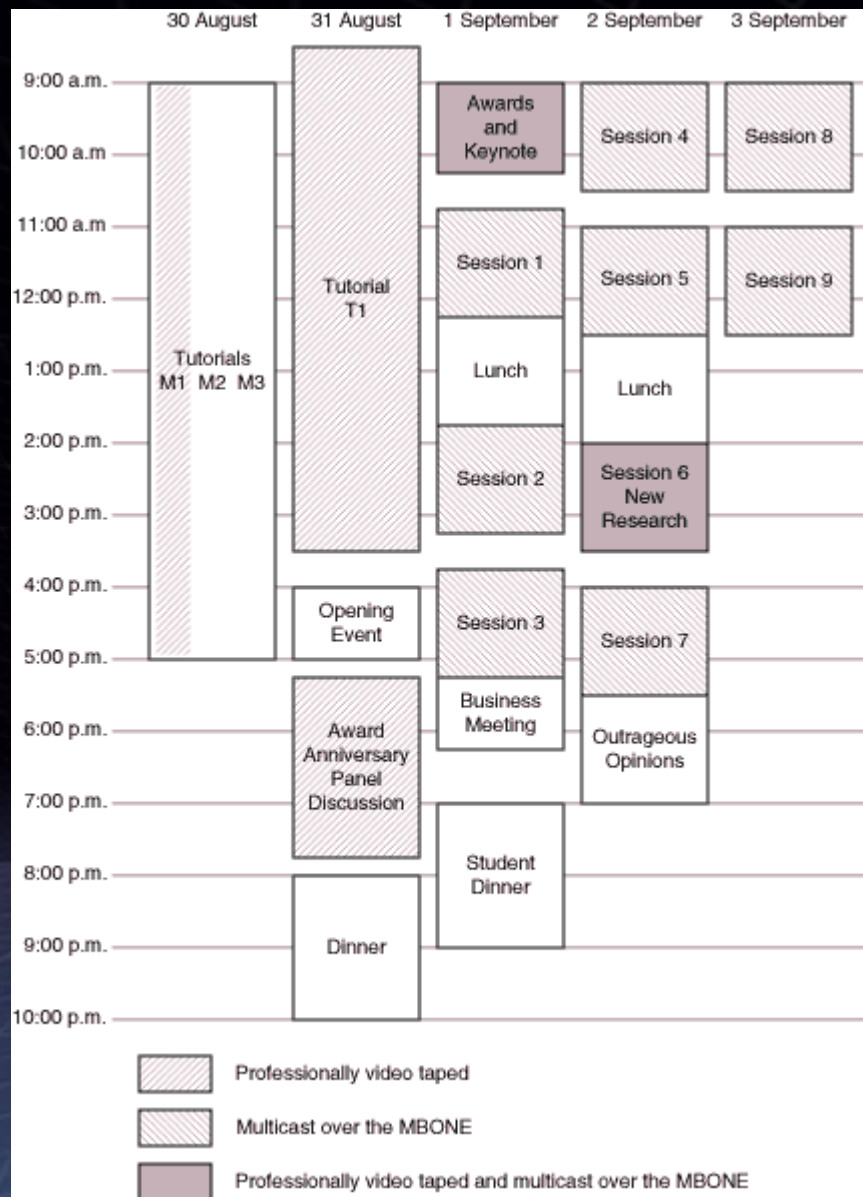


János Tapolcai
Budapest University of Technology
and Economics, Hungary

Source of the idea: Lake Balaton, 3 years ago



SIGCOMM 1999 Program



- Main conference
- Tutorials
- Outrageous opinions
- Dinner
- Open business meeting
- Student dinner

SIGCOMM 1999 Student Dinner

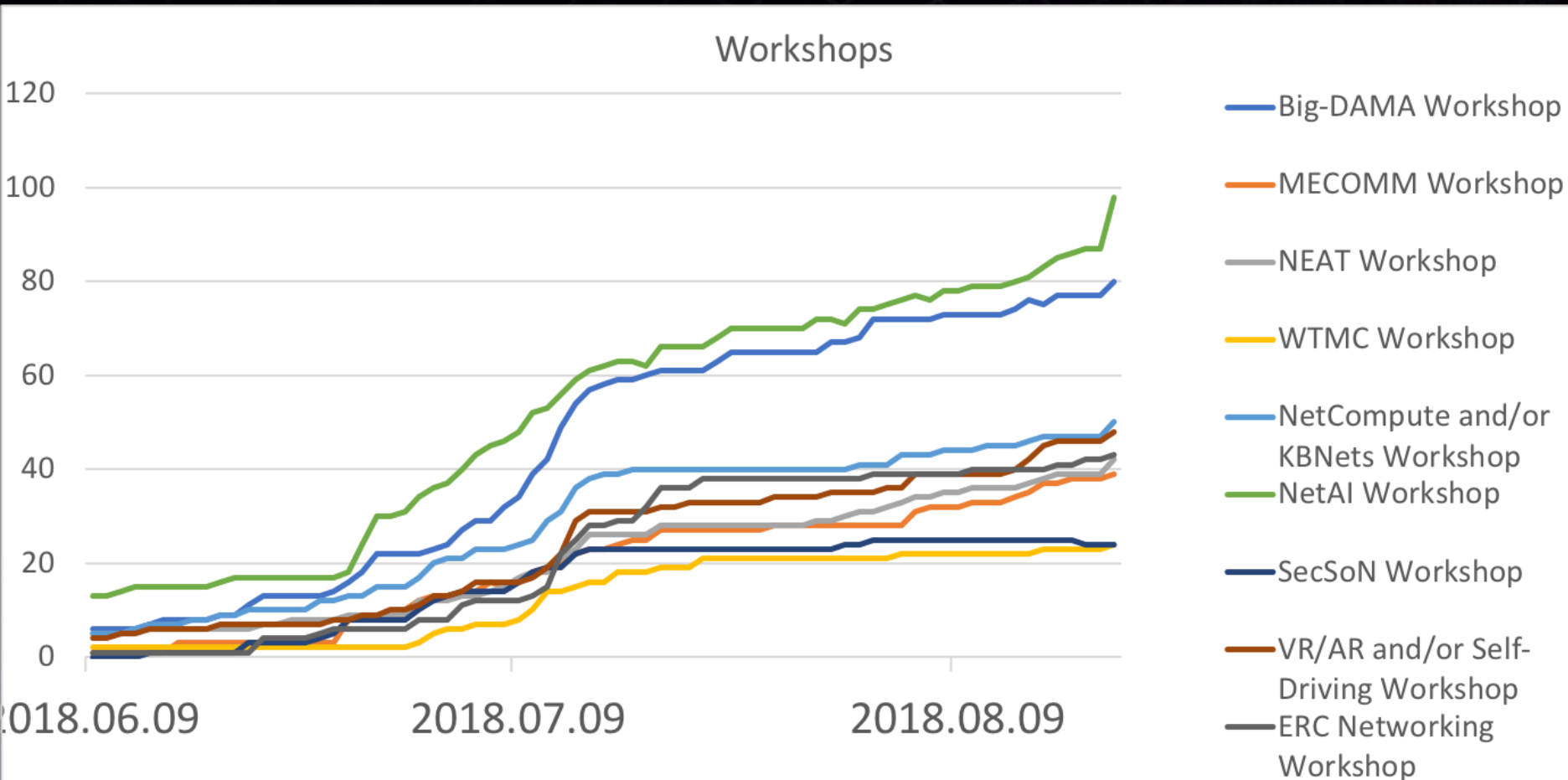
Sergey Gorinsky

Dina Katabi



SIGCOMM 2018: Workshops

- 8 full-time and 4 half-time workshops
- Registrations: AI taking over SIGCOMM

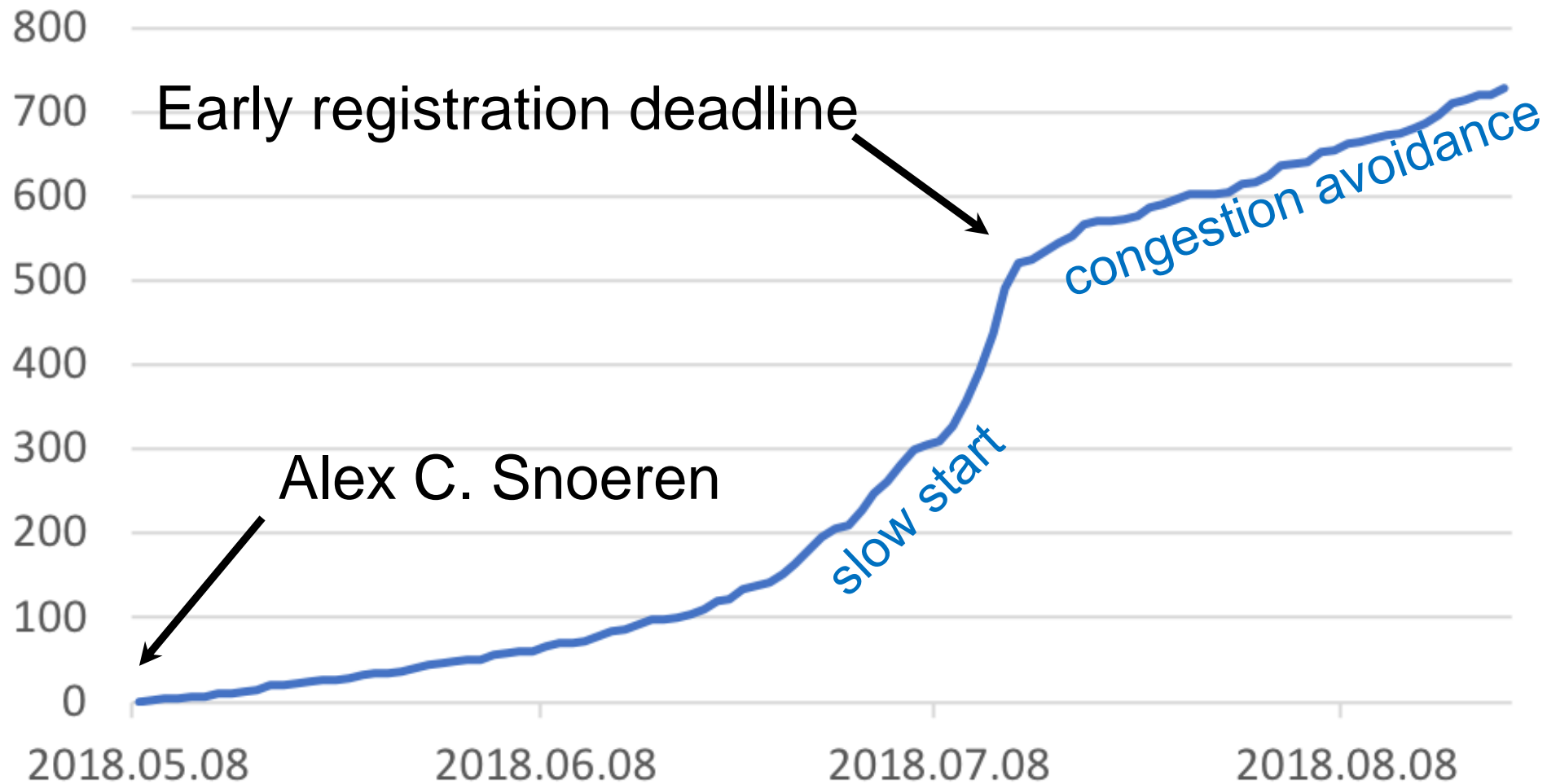


Extra Events of the SIGCOMM 2018 Program

- Topic previews
- Industrial demos
- Posters and demos
- Student research competition
- Mentoring and one-on-one meetings
- Best of CCR
- (First ever) SIGCOMM hackathon on Saturday

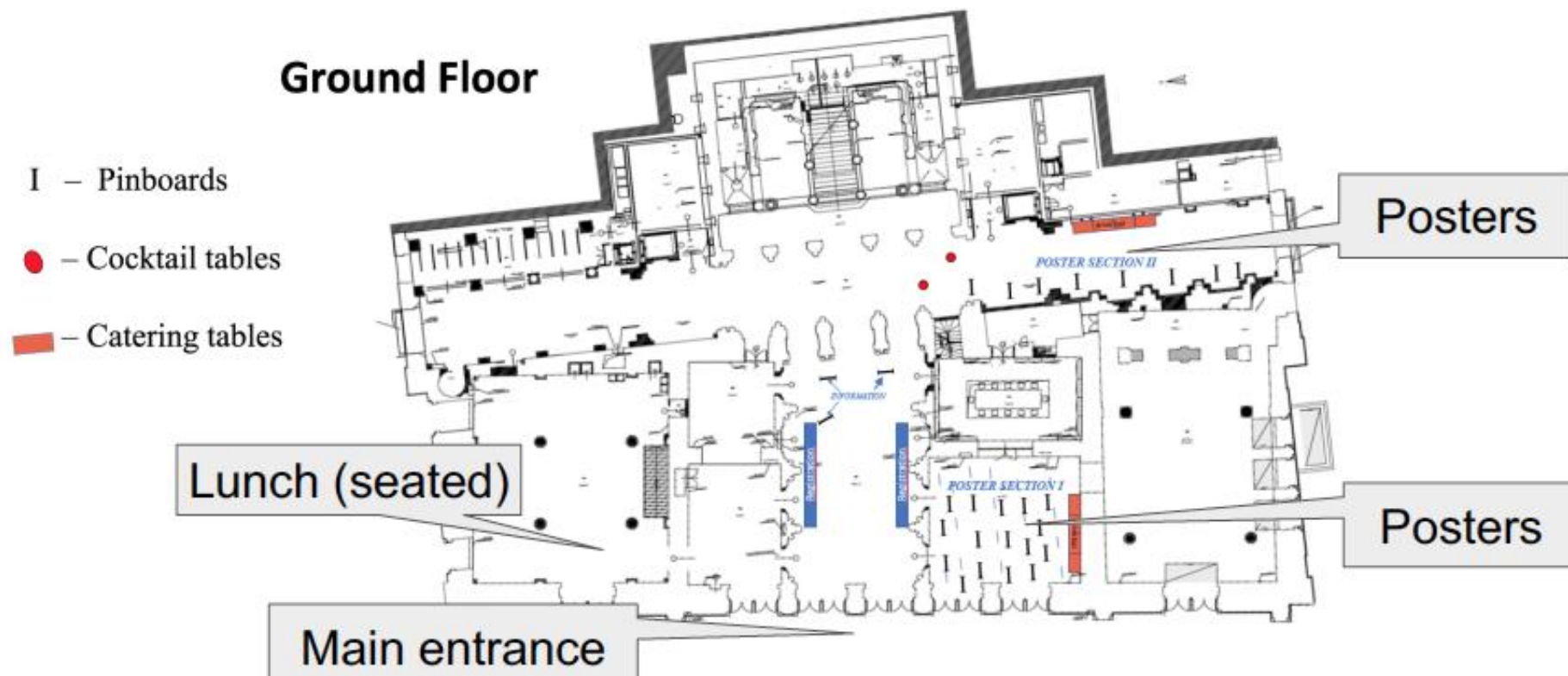
Total Number of SIGCOMM 2018 Registrations

7



Vigadó: Ground Floor

- Lunch distributed among 3 floors
 - Seated on the Ground Floor only, in the Restaurant
 - Lunch badges given out for pre-scheduling
- Posters in two spaces on the Ground Floor



Vigadó: 2nd Floor

- Main-conference sessions
- Industrial demos, exhibits, demos, one-on-one meetings

2nd Floor

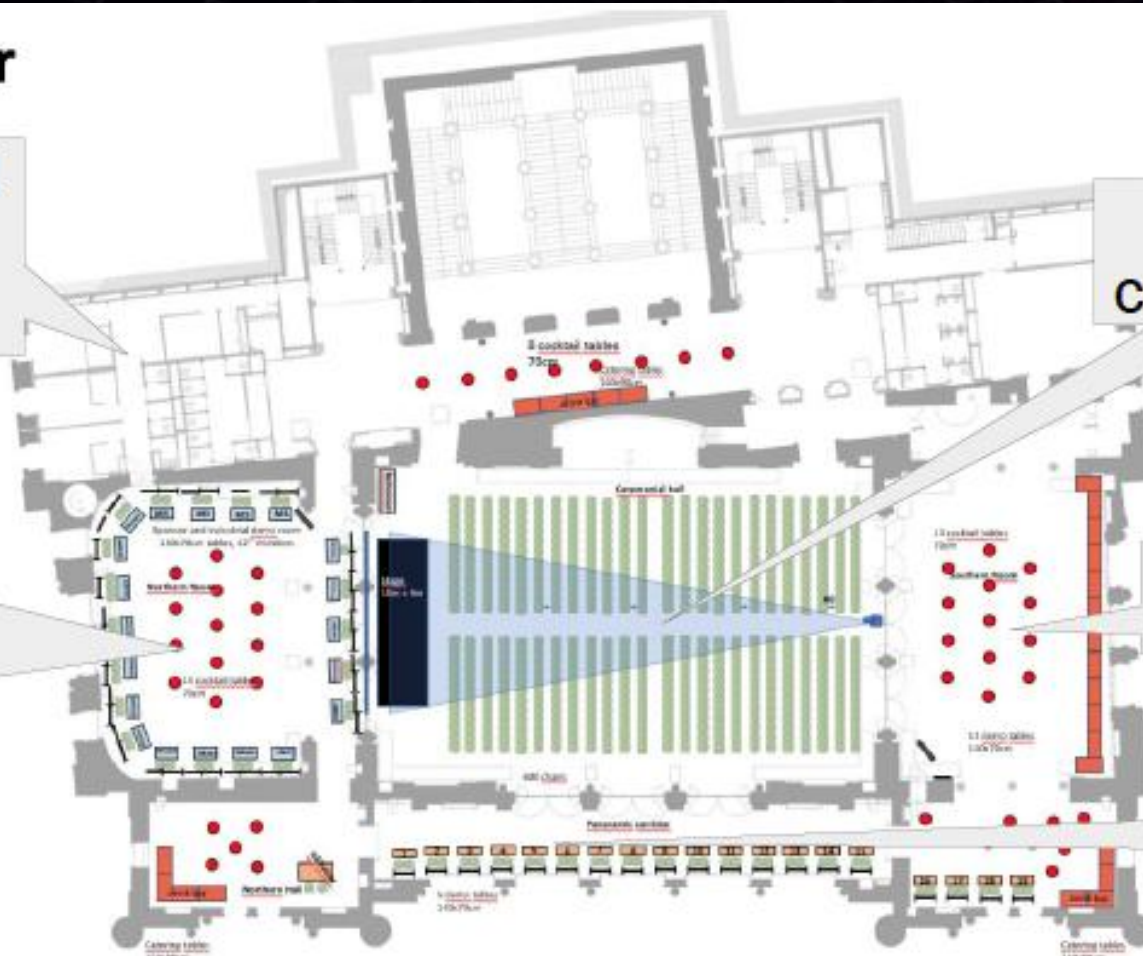
Mentoring and
one-on-one
meetings

Exhibits
and
industrial
demos

Main
conference

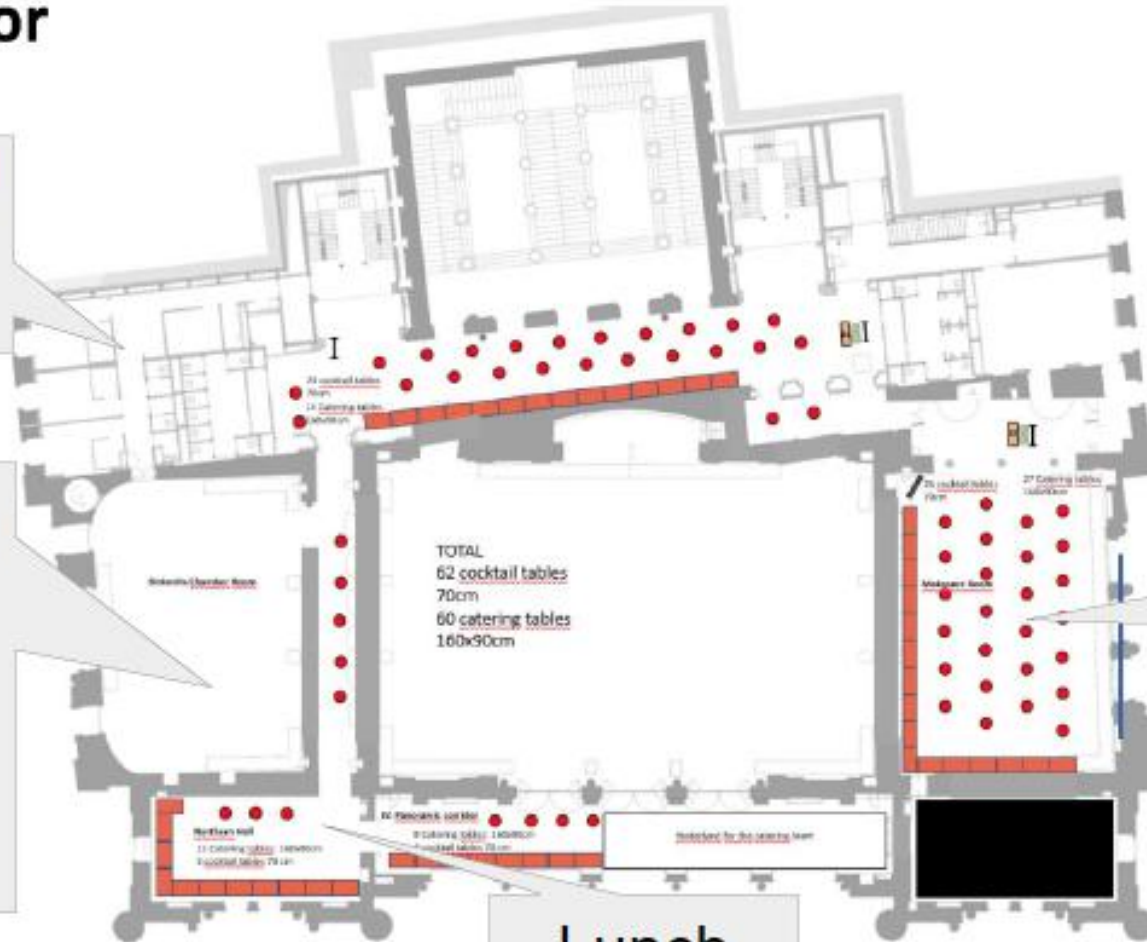
Lunch

Demos



- ## 4th Floor

Topic-preview
sessions and
streaming of
the main
conference

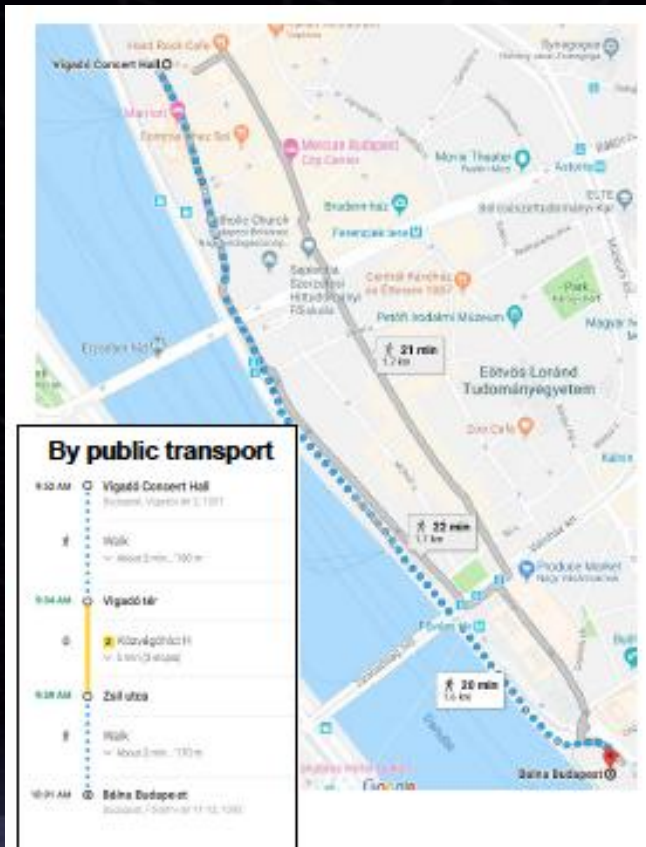


Lunch

Lunch

Student Dinner

- Tuesday, 8:00 pm - 11:00 pm
- Location: Bálna Building
- Free tickets: students, EC, OC, and PC members, sponsor representatives



Banquet

- Wednesday, 7:05 pm - 11:00 pm
- Location: Vigadó Square, Pier 5, Európa Ship
- Európa Ship opens for boarding shortly after 7 pm and departs by 7:30 pm
- Don't miss the boat!

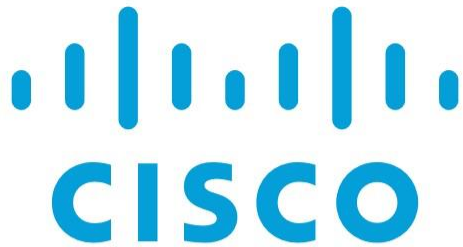


N2Women Dinner

- Thursday, 7:00 pm - 10:00 pm
- Location: Akadémia Klub, Krúdy Hall (Hungarian Academy of Sciences)



Sponsors



Thanks!

- OC members and student volunteers
 - Especially



K. K. Ramakrishnan



Levente Csikor



Zalán Heszberger



István Gódor



István Pelle

Adhoc CARES Committee

Committee to Aid REporting on discrimination and haraSsment



Ellen Zegura
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Jennifer Rexford
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Craig Partridge
craig.partridge [at] colostate.edu



Sujata Banerjee
sujata.banerjee [at] acm.org

Message from the PC Chairs

Mark Handley & Dina Katabi



SIGCOMM 2018
BUDAPEST

Program Committee

- 50 PC members
 - Single tier PC
 - Each personally reviewed on average 21 papers
 - Great mix of area of expertise, experience, and affiliation
 - Tried hard to get a good mix of gender, geography

Review Process Overview

- 222 papers submitted
 - 10% less than 2017, same as 2016
- Didn't have a separate experience track, but did have "experience paper" topic
 - Received 14 experience papers and accepted 3

Review Process Overview

Round 1

Papers received 3 reviews

109 papers progressed to round 2

Round 2

Papers received ~3 more reviews

Round 3

Papers that had high variance, or needed additional opinions received additional reviews

PC Meeting

- The whole PC met at MIT for 1.5 days
- We discussed 72 papers (out of the 109 that made it to round 2)
- 40 papers accepted

What does Sigcomm'18 emphasize?

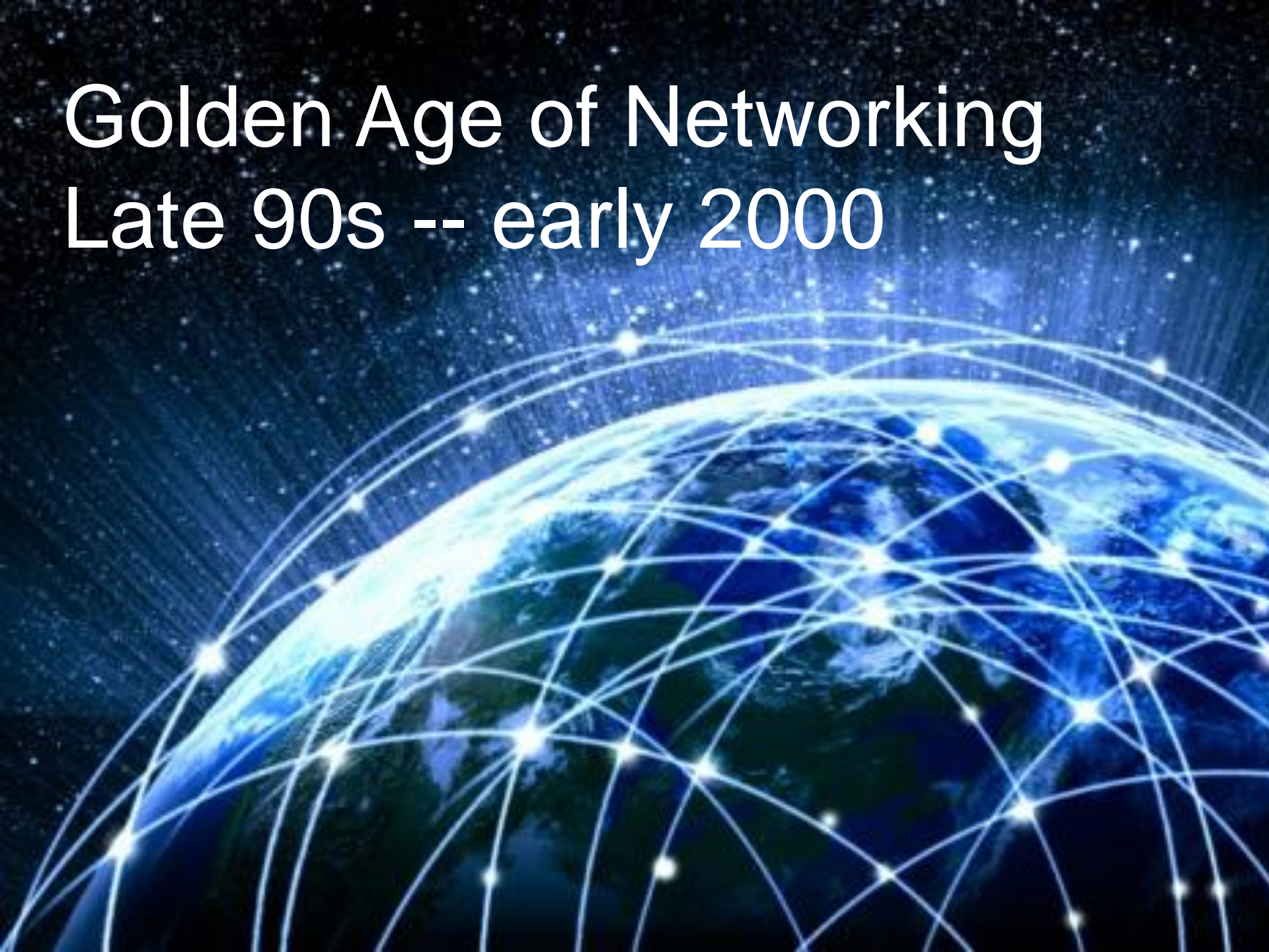
Important deep contributions

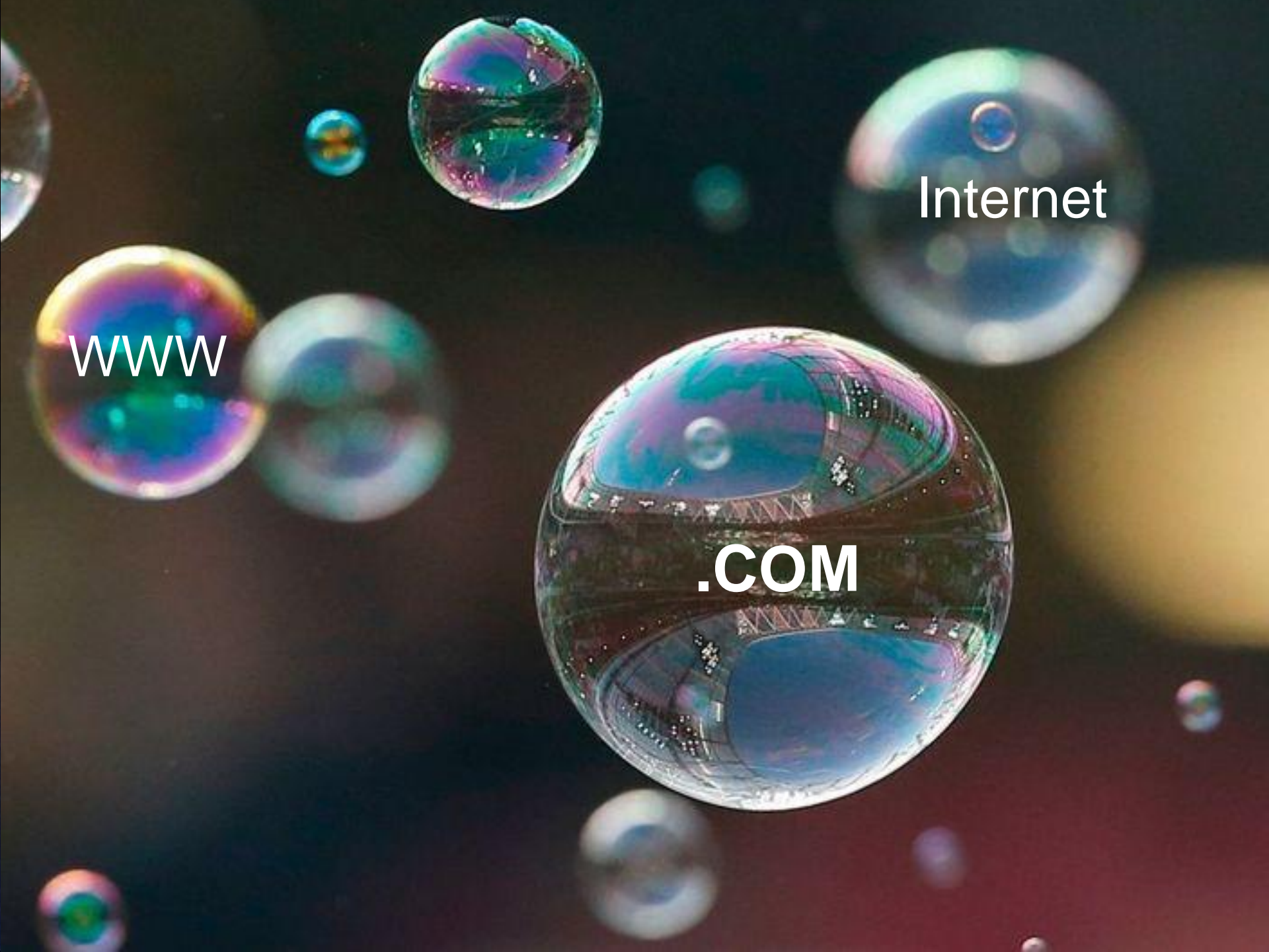
Daring novel ideas

Breadth of scope and inclusivity

Golden Age of Networking

Late 90s -- early 2000

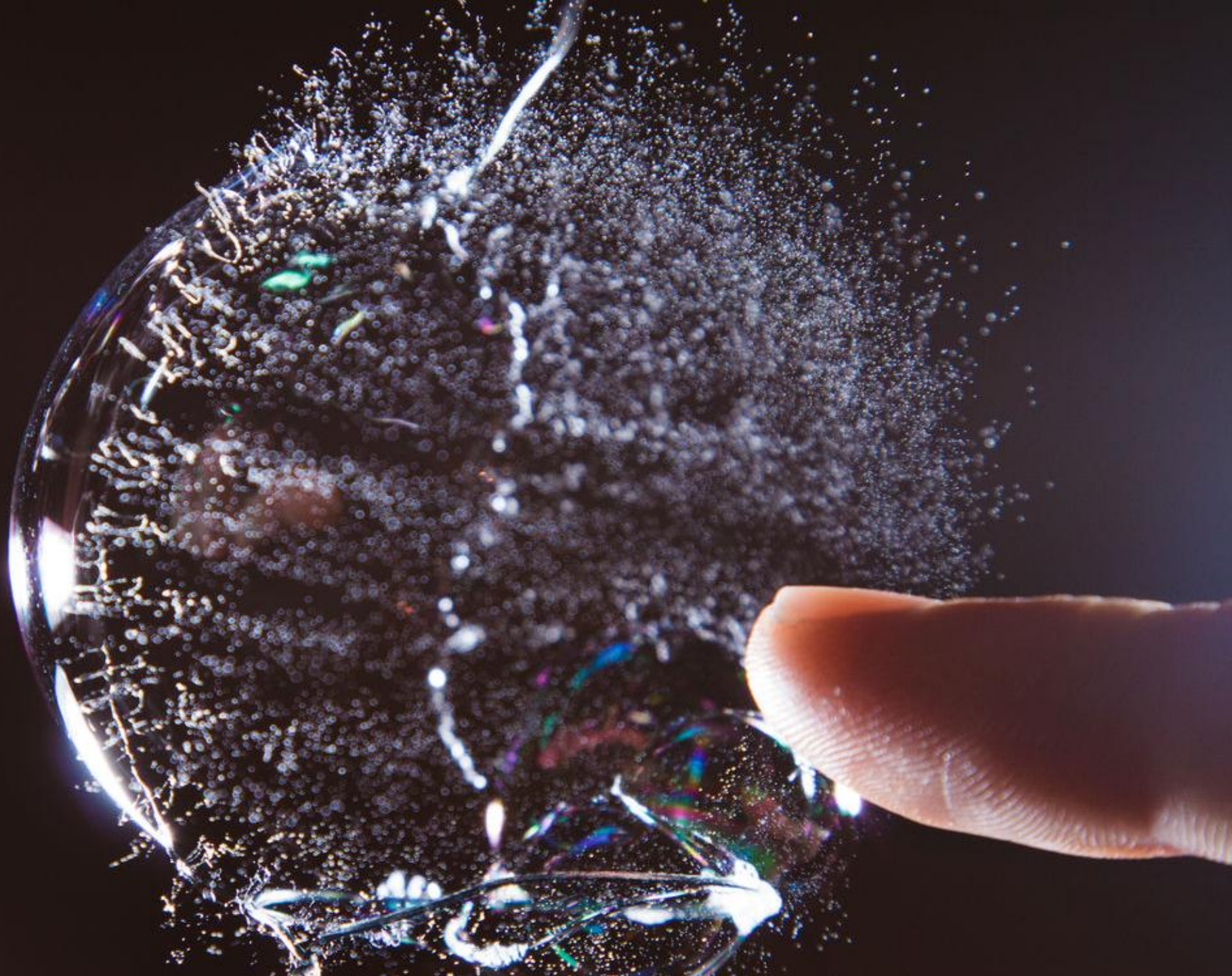




Internet

WWW

.COM



New topics kept the field hot!

Wireless



Data Centers



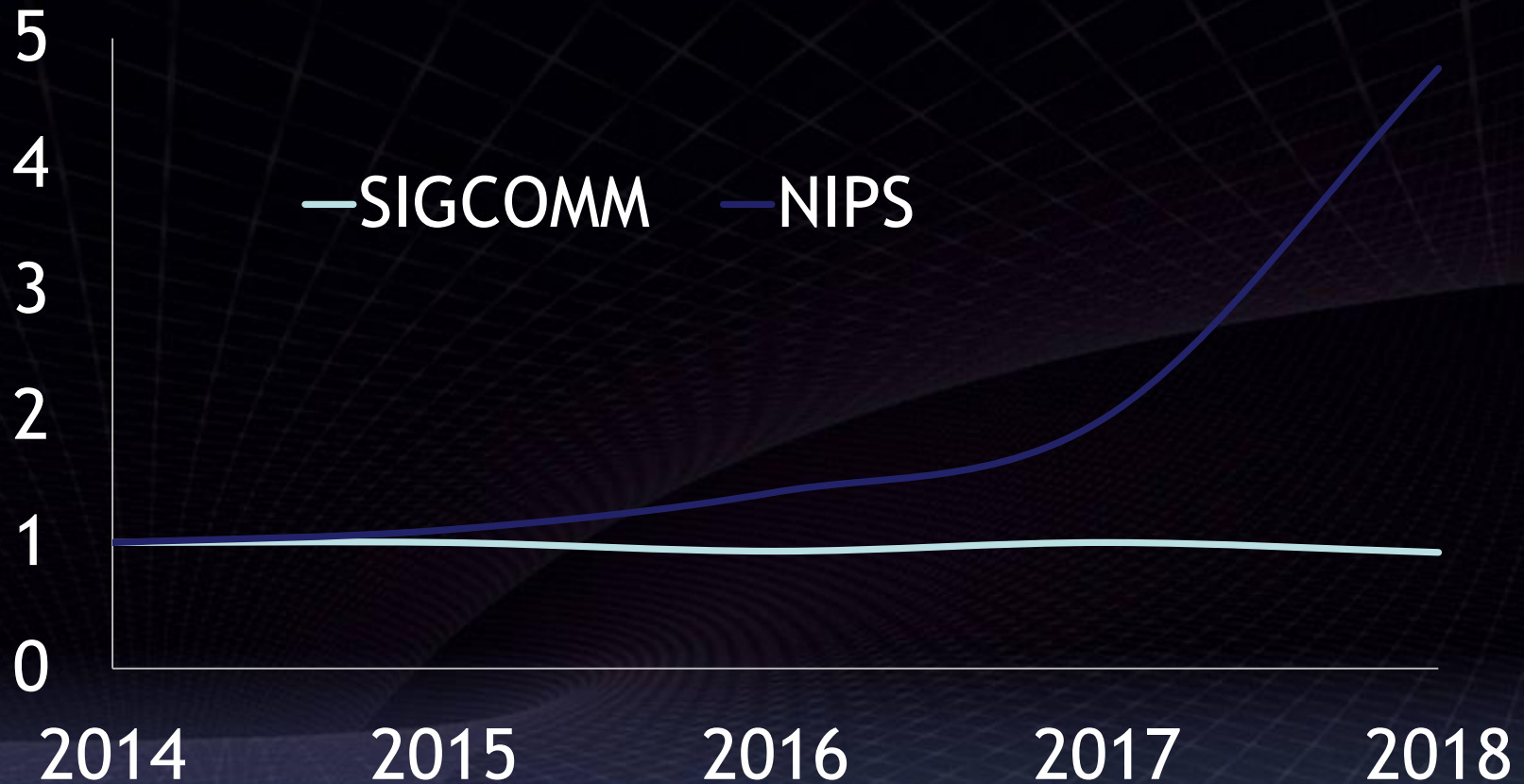
The Rise of Machine Learning



Sigcomm 2017 Annual Report

“It appears that computer communication is no longer a ‘hot’ topic these days; the focus has moved to topics such as robotics, AI, big data, and deep learning”

Submissions (normalized)



Of course, networking will always be a key field, but also want it hot and growing

The Future

- We're still in early days of a connected world
- No-one knows what the future networked world will look like
- ***Sigcomm needs to push the envelope of what we know, believe, and are comfortable with***

The Role of Sigcomm

Communicate ideas that push the field of networking forwards faster, better, or in new directions

- Daring new ideas
 - Even if the initial version is not flawless
- Deeper understanding of fundamentals
- Cross-fertilization of ideas from the fringes

SIGCOMM'18: Anything networking or networked systems

Classics: Congestion Control, Routing, Measurements

Modern: DC, SDN, Wireless, RDMA, Net Verification

Emerging: IoT, Applications of ML, Acoustic Links,

Best Paper Awards

- PC voted on the Best Paper and Best Student Paper awards
- PC chair papers were not eligible

Best Student Paper Award

Sincronia: Near-Optimal Network Design for Coflows

Saksham Agarwal (*Cornell, USA*),

Shijin Rajakrishnan (*Cornell, USA*),

Akshay Narayan (*MIT, USA*),

Rachit Agarwal, (*Cornell, USA*),

David Shmoys (*Cornell, USA*),

Amin Vahdat (*Google, USA*)

Best Paper Award

Inferring Persistent Interdomain Congestion

Amogh Dhamdhere (*CAIDA, USA*),

David D. Clark (*MIT, USA*),

Alexander Gamero-Garrido (*CAIDA, USA*),

Matthew Luckie (*Waikato, New Zealand*),

Ricky K. P. Mok, (*CAIDA, USA*)

Gautam Akiwate, (*CAIDA, USA*)

Kabir Gogia (*CAIDA, USA*),

Vaibhav Bajpai (*TU Munich, Germany*),

Alex C. Snoeren (*UCSD, USA*),

kc claffy (*CAIDA, USA*)



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Test of Time and Dissertation Awards

Dina Papagiannaki, Award Chair, ACM SIGCOMM

2018 SIGCOMM Test of Time Award

- A Scalable, Commodity Data Center Network Architecture
(SIGCOMM 2008)

Mohammad Al-Fares, Alexander Loukissas, and Amin Vahdat

“This paper lucidly articulates a vision for what is today the standard structure of a data center network: commodity packet switches interconnected in a fat-tree topology. By posing and addressing practical challenges in data center networking, the authors drew attention to this then-emerging area, and propelled the community to consider the design of new networking techniques for the relatively ‘green field’ of the data center -- a research area that has flourished since.”

- Committee: John Byers (Boston University, chair), Krishna Gummadi (MPI), Brad Karp (UCL), and Lili Qiu (University of Texas)

2018 SIGCOMM Test of Time Award

- XORs in the air: practical wireless network coding (SIGCOMM 2006)
Sachin Katti, Hariharan Rahul, Wenjun Hu, Dina Katabi, Muriel Médard, and Jon Crowcroft

“This paper's interdisciplinary team brought information-theoretic research on network coding to bear on the domain of wireless networks, with an ingenious new scheme for achieving capacity gains by jointly coding information from multiple flows into individual packets. This paper's design and implementation upended the networking community's understanding of limits on wireless capacity and ushered in diverse work on capacity improvement in the decade that followed.”

- Committee: John Byers (Boston University, chair), Krishna Gummadi (MPI), Brad Karp (UCL), and Lili Qiu (University of Texas)

2017 SIGCOMM Dissertation Award

- Designing Fast and Programmable Routers

Anirudh Sivaraman Kaushalram

“Sivaraman's dissertation makes pioneering and impactful contributions to the design and implementation of programmable routers that run at hardware line rates.”

- Committee: Marco Mellia (Politecnico di Torino), T.S. Eugene Ng (Rice University, chair), Xiaowei Yang (Duke University), and Haifeng Yu (National University of Singapore)



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SIGCOMM 2018 RECOGNIZING CONTRIBUTIONS

Roch Guérin, Chair, ACM SIGCOMM

Recognizing those who make it possible

- SIGCOMM 2018 General Chairs
 - Sergey Gorinsky
 - János Tapolcai
- SIGCOMM 2018 Program Chairs
 - Mark Handley
 - Dina Katabi

Recognizing a lifetime of contributions

- 2018 ACM SIGCOMM Lifetime Achievement Award
Recipient: Prof. Jennifer Rexford
 - For her fundamental and practical contributions to making the Internet more reliable and predictable, and for her outstanding mentoring and community service
 - Contributions to inter-domain routing, traffic engineering, network architecture, network programming, Internet measurements, software defined networking, and much more
 - Many previous recognitions: 2017 NCWIT Harrold and Notkin Award, Athena Lecturer award (2016), NAE member (2014), ACM Fellow (2008), SIGCOMM chair (2003-2007), ACM Grace Murray Hopper award (2004), Pyne Prize for service to Fox (1991), and numerous best paper and test-of-time awards
 - Co-author of *“Web Protocols and Practice: HTTP/1.1, Networking Protocols, Caching, and Traffic Measurement,”* 2001, and co-editor of *“She’s an Engineer? Princeton Alumnae Reflect,”* 1993