

$\tau$  2016



# TAU 2016



*Debjit Sinha & Qiuyang Wu*

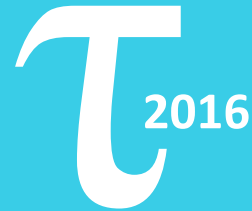
Hilton Sonoma Wine Country, Santa Rosa, CA

March 10-11, 2016

[www.tauworkshop.com](http://www.tauworkshop.com)

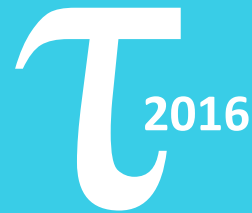


# TAU trivia

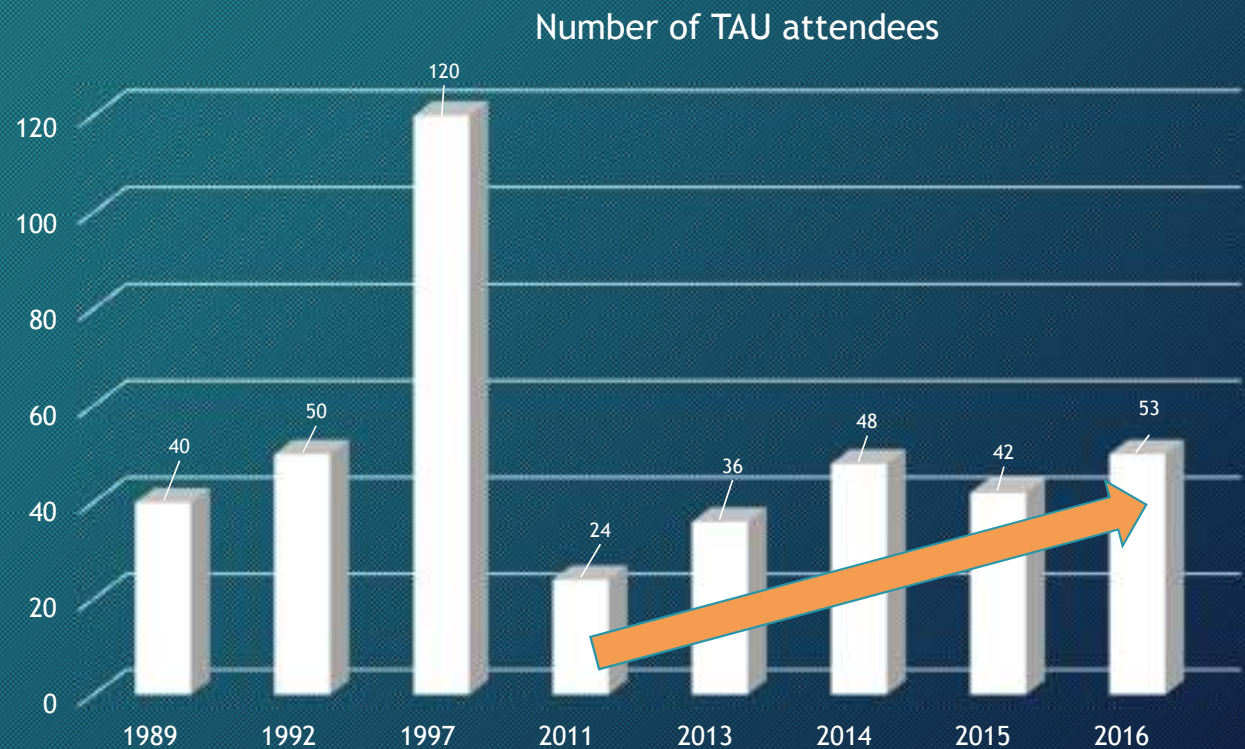


- Longest title - *ACM International Workshop on Timing Issues in the Specification and Synthesis of Digital Systems*
  - Shortest nickname - τ
- Started in 1989 @ Univ. of California at Berkeley [40 attendees]
  - General chair - Rick McGeer, TPC chair - Bob Brayton
- TAU 2016 - 23<sup>rd</sup> in series
  - Evolved from a pure digital timing workshop
  - Analog and mixed signal circuits
  - Power analysis, optimization

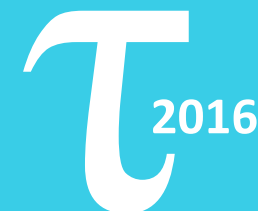
# TAU evolution - Few data points



- 40+ attendees on average
- Growth in the past 5 years
- Industry dominated
  - < 15% academia
- Timing contest since 2013
  - Send your problems
  - Participate [Organize]



# TAU 2016 organization



## Organizing committee

- General chair: Debjit Sinha (IBM)
- TPC chair: Qiuyang Wu (Synopsys)
- Contest chair: Jin Hu (IBM)
- Past general chair: Igor Keller (Cadence)

## Contest committee

- Chen Xi (Synopsys)
- Jin Hu (IBM) - Chair
- Song Chen (Synopsys)
- Xin Zhao (IBM)

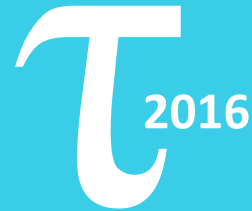
## Technical program committee (TPC)

- Oscar Ou (MediaTek)
- Hong Li (Xilinx)
- João Geada (CLK DA)
- Jonathan Bishop (Mentor Graphics)
- Ramesh KS (Intel)
- Ken Stevens (University of Utah)
- Masanori Hashimoto (Osaka University)
- Peng Li (Texas A&M University)
- Praveen Ghanta (Cadence)
- Qiuyang Wu (Synopsys) - Chair
- Richard Phillips (nVidia)
- Subra Sripada (Synopsys)
- Tom Spyrou (Altera/Intel)
- Vladimir Zolotov (IBM)
- Xin Li (Carnegie Mellon University)

## ACM & Hilton

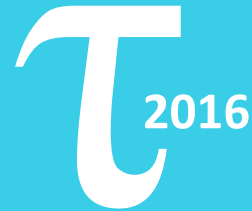
- Diana Brantuas, Farrah Khan, Stephanie Sabal (ACM)
- Tessa Borquez, Danni Randolph (Hilton)

# Technical program



- 53+ attendees
- EDA, design houses, foundries, academia
  - 17 companies - Arcadia, ARM, Broadcom, Cadence, Clariphy, ClkDA, HHMI, IBM, Intel/Altera, MediaTek, Mentor Graphics, NVIDIA, Oracle, Qualcomm, Synopsys, TSMC, Xilinx
  - 6 universities - UCSD, UIUC, Univ. of Utah, Kyoto Institute of Technology, Osaka University, Kyoto University
- 4 special sessions - Keynotes, contest talk etc.
- 5 technical sessions - 20 papers [including 3 invited talks]
- 2 panels

# Keynotes, special session & invited talks



Patrick Groeneveld

*Optimizing Automotive Drive Trains: from Energy Source to where the Rubber Meets the Road [9 AM, Mar 10]*

Louis Scheffer

*Timing in Biologic Systems [2 PM, Mar 10]*

Andrew B. Kahng

*In search of Lost Time [9 AM, Mar 11]*

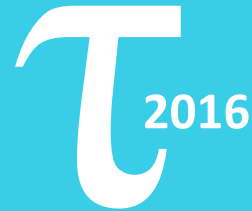


TAU 2006 chair

## Invited talks

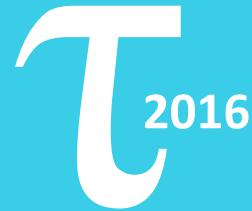
- *Intel - High Performance Latch Based Design: Optimization and Timing Verification Challenges*
- *Altera/Intel - The Stratix 10 Hyperflex Architecture and its impact on Timing Analysis*
- *Xilinx - A Practical Approach to Clock Skew Optimization for FPGAs*

# Logistics



- Complimentary Wi-Fi (in meeting room [passcode: tau] and guest room)
- Complimentary parking
- Complimentary cheese & wine tasting at lounge every evening after 5PM
- Reception (dinner buffer): today 7-9 PM @ Sonoma Ballroom
- Speakers
  - Upload your charts to TAU laptop before session (breakfast/break)
    - Unless you have emailed your latest version to Qiuyang
  - Strictly 12 mins + 3 mins Q&A for most talks
  - Inform TPC chair if you do not want your charts to be uploaded to the website

# TAU 2016 acknowledgments



- Sponsors - Thank You
  - ACM
  - Cadence
  - IBM
  - Synopsys
- You all
  - Participate - TPC, contest committee
  - Suggest
  - Contribute
  - Spread the word ...
- Enjoy these two days
  - Mini vacation at Sonoma Wine Country
  - Avoid laptop usage (*if possible*)
  - Please switch-off or mute cell-phones
- Event pics will be posted online  
[www.tauworkshop.com](http://www.tauworkshop.com)