

E³S Annual Retreat, September 20-21, 2018, Berkeley

Welcome and Review of Agenda

Eli Yablonovitch

Director

Center for Energy Efficient Electronics Science



A Science & Technology Center

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Center for Energy Efficient
Electronics Science

This is a Private Meeting.

This is not a public disclosure of information.

For our corporate partners, please share the information from this meeting with your Company to help build bridges between your Company and the Center.



11/1/2018

A Science & Technology Center

2018 E3S Annual Retreat

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Center for Energy Efficient
Electronics Science

Welcome to the 2018 E³S Annual Retreat

- **E³S Faculty, Students, Postdocs and Staff**
- **Industry Partners**
 - **Lam Research:** Nerissa Draeger, Samantha Tan, Wenbing Yang, Daniel Peter, Younghee Lee, Hwan Sung Choe
 - **Applied Materials:** Namsung Kim
 - **Intel:** Uygur Avci
 - **IBM:** Paul Solomon (remote participation)
 - **HPE (ret.):** Stanley Williams



Retreat Agenda: Day 1, Thursday, September 20

Time	Activity / Topic	Speakers
7:30 AM	<i>Breakfast & Check-In</i>	
8:00 AM	Welcome & Introduction	
	Review of Agenda	
	Goals for the Retreat	Eli Yablonovitch
	Center Overview	
8:30 AM	Theme I: Nanoelectronics	
	Theme I Overview	Eli Yablonovitch
	Progress on Graphene Nanoribbon Project	Steven Louie
	Progress on III-V Nanowire Transistor Project	Jesús del Alamo
	Progress on 2D Chalcogenide Transistor Project	Ali Javey
	Open Discussion	



Retreat Agenda: Day 1 (morning) *continued*

Time	Activity / Topic	Speakers
9:55 AM	<i>Break & Poster Set-Up</i>	
10:05 AM	Theme II: Nanomechanics	
	Theme II Overview	Tsu-Jae King Liu
	Progress on NEM Relay Project	Sara Fathipour
	Progress on Squitch Project	Jinchi Han
	Progress on Stritch Project	David Zubia, Aldo Vidana
	Open Discussion	
11:20 AM	System Integration	
	System Integration Overview	Vladimir Stojanović
	Open Discussion	
11:50 AM	<i>Lunch and Poster Session</i>	



Retreat Agenda: Day 1 (afternoon)

Time	Activity / Topic	Speakers
1:10 PM	Theme III: Nanophotonics	
	Theme III Overview	Ming Wu
	Progress on Antenna-Enhanced LEDs	Seth Fortuna
	Progress on New Antenna Coupling Structure	Sean Hooten
	Progress on III-V Epitaxy Heterostructures	Jeehwan Kim
	Open Discussion	
2:25 PM	Break	
2:45 PM	Theme IV: Nanomagnetism	
	Theme IV Overview & Progress on Ultrafast Magnetic Switching	Jeffrey Bokor
	Spin-Orbit Torque Switching Using Topological Effects	Shan Wang
	Topological Insulator Spintronics	Niklas Roschewsky
	Progress on Magnetic Tunnel Junction Switching	Sakhrat Khizroev
	Open Discussion	



Retreat Agenda: Day 1 (afternoon) *continued*

Time	Activity / Topic	Speakers
4:00 PM	Walk to <u>Women's Faculty Club</u>	
4:30 PM	Parallel Sessions in Women's Faculty Club: <ul style="list-style-type: none">• Faculty and Industry Partners: Feedback & Discussion Meeting (Boardroom)• Students and Postdocs: Professional Development Workshop (Lounge)	
5:30 PM	Walk to <u>Berkeley Faculty Club</u>	
5:45 PM	Dinner and Recognitions Heyns Room (Faculty Club)	



Retreat Agenda: Day 2, Friday, September 21

Time	Activity / Topic	Speaker / Facilitator
7:30 AM	<i>Breakfast</i>	
8:00 AM	Center Management Management, Metrics, Knowledge Transfer Open Discussion	Michael Bartl
8:30 AM	Education and Diversity Overview, Challenges, Legacy Update on E3S e-book Diversity Session Open Discussion	Kedrick Perry Farnaz Niroui Kedrick Perry
10:00 AM	<i>Break</i>	



Retreat Agenda: Day 2 (morning), *continued*

Time	Activity / Topic	Speaker / Facilitator
10:15 AM	A Look Beyond 2020: Center Legacy Breakout Sessions Reporting from Breakout Sessions Open Discussion	Vladimir Bulović (Moderator)
11:55 AM	Closing Remarks	Eli Yablonovitch
12:00 PM	<i>Lunch (boxed)</i>	
12:30 – 2:00 PM	Executive Committee ONLY ExComm Meeting	

