

# SUMMER TOPICALS MEETING SERIES 2018

## PROGRAM – AT – A – GLANCE

	Integrated Mid-Infrared Photonics (IMIP)	Machine Learning-Assisted Software-Defined Optical Networks (MLSDN)	Non-Hermitian and Topological Photonics (NTP)	Non-Hermitian and Topological Photonics (NTP)	Quantum Networks (QN)	Quantum Optical Phenomena in Optoelectronics (QOPO)	SDM and Beyond (SDMB)
Room:	Waikoloa 1	King's 2	Kohala 2	Kohala 1	Kohala 3	Kohala 4	King's 3
<b>Monday, 9 July</b>							
8:00 am – 8:30 am	<b>BREAKFAST - Kohala Promenade</b>						
8:30 am – 10:00 am	<b>MA1:</b> Thermal and Germanium Optical Sources I <b>Session Chair:</b> A. Chelnokov		<b>MC1:</b> Topological Lasers and Emitters I <b>Session Chair:</b> M. Rechtsman		<b>MD1:</b> Networks & Applications <b>Session Chair:</b> M. Brodsky	<b>ME1:</b> QOPO Plenary <b>Session Chair:</b> S. Reitzenstein	<b>MF1:</b> SDM Transmission I <b>Session Chair:</b> B. Puttnam
10:00 am – 10:30 am	<b>COFFEE BREAK - Kohala Promenade</b>						
10:30 am – 12:00 pm	<b>MA2:</b> Thermal and Germanium Optical Sources II <b>Session Chair:</b> O. Nakatsuka	<b>MB2:</b> MLSDN Plenary <b>Session Chair:</b> Q. Zhuge	<b>MC2:</b> PT-symmetric Non-Hermitian Photonics <b>Session Chair:</b> M. Segev		<b>MD2:</b> Quantum Repeater Implementations <b>Session Chair:</b> V. Malinovsky	10:30 am-12:10 pm <b>ME2:</b> Lasers <b>Session Chair:</b> S. Reitzenstein	<b>MF2:</b> SDM Components I <b>Session Chair:</b> J. Schroder
12:00 pm-1:30 pm	<b>LUNCH BREAK (ON OWN)</b>						
1:30 pm – 3:00 pm	<b>MA3:</b> (Si)GeSn Devices I <b>Session Chair:</b> D. Buca	<b>MB3:</b> Applications of ML in Optical Networks I <b>Session Chair:</b> R. Nejabati	<b>MC3:</b> Active Nanophotonics <b>Session Chair:</b> S. Fainman		<b>MD3:</b> Quantum Repeaters <b>Session Chair:</b> B. Sanders	1:50 pm-3:00 pm <b>ME3:</b> Quantum Emitters <b>Session Chair:</b> F. Jahnke	<b>MF3:</b> Multi-mode Fiber Modelling <b>Session Chair:</b> I. Gasulla
3:00 pm – 3:30 pm	<b>COFFEE BREAK - Kohala Promenade</b>						
3:30 pm-5:00 pm	<b>MA4:</b> (Si)GeSn Devices II <b>Session Chair:</b> M. Takenaka	<b>MB4:</b> Performance Monitoring <b>Session Chair:</b> G. Huang	<b>MC4:</b> Topological Photonics and Weyl Points <b>Session Chair:</b> Y. Chong	3:30 pm-5:15 pm <b>MG4:</b> Lasing in Non-Hermitian and PT-symmetric Systems <b>Session Chair:</b> J. Wiersig	<b>MD4:</b> Quantum Key Distribution <b>Session Chair:</b> G. Kanter	3:30 pm-5:10 pm <b>ME4:</b> Lasers and Quantum Emitters I <b>Session Chair:</b> J. Coleman	3:30 pm-4:30 pm <b>MF4:</b> Spatial Diversity and Quantum Systems <b>Session Chair:</b> S. Leon-Saval
7:00 pm-9:00 pm	<b>MP: WELCOME RECEPTION &amp; POSTER SESSION – Grand Promenade</b>						

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<b>Room:</b>	Waikoloa 1	King's 2	Kohala 2	Kohala 1	Kohala 3	Kohala 4	King's 3
<b>Tuesday, 10 July</b>							
8:00 am – 8:30 am	<b>BREAKFAST - Kohala Promenade</b>						
8:30 am – 10:00 am	<b>TuA1:</b> (Si)GeSn Devices III <b>Session Chair:</b> S.-Q. (Fisher) Yu	<b>TuB1:</b> Multilayer Optical Networks <b>Session Chair:</b> R. Muñoz	8:30 am – 9:30 am <b>TuC1:</b> Topological Lasers and Emitters II <b>Session Chair:</b> S. Mittal		9:00 am-10:00 am <b>TuD1:</b> Quantum Sensing <b>Session Chair:</b> T. Northup	<b>TuE1:</b> Applications <b>Session Chair:</b> G. Weihs	<b>TuF1:</b> Multi-mode Imaging <b>Session Chair:</b> J. Carpenter
10:00 am – 10:30 am	<b>COFFEE BREAK - Kohala Promenade</b>						
10:30 am – 12:00 pm	<b>TuA2:</b> (Si)GeSn Material Properties I <b>Session Chair:</b> D. Buca	<b>TuB2:</b> Applications of ML in Optical Networks II <b>Session Chair:</b> O. Yilmaz	<b>TuC2:</b> Non-Hermitian Resonances and Optical Transport <b>Session Chair:</b> D. Christodoulides		<b>TuD2:</b> Spectral and Temporal Entanglement Manipulation <b>Session Chair:</b> M. Bellini	<b>TuE2:</b> Resonators and Si Photonics <b>Session Chair:</b> G. Eisensterin	10:30 am-11:45 am <b>TuF2:</b> SDM Transmission II <b>Session Chair:</b> J. Schroder
12:00 pm-1:30 pm	<b>LUNCH BREAK (ON OWN)</b>						
1:30 pm – 3:00 pm	<b>TuA3:</b> (Si)GeSn Material Properties II <b>Session Chair:</b> W. Du	<b>TuB3:</b> Access Networks <b>Session Chair:</b> S. Savory	<b>TuC3:</b> Non-reciprocal and Topological Phenomena in Photonics <b>Session Chair:</b> B. Zhen	<b>TuG3:</b> Active Nanophotonics <b>Session Chair:</b> M. Stockman	<b>TuD3:</b> Quantum Metrology <b>Session Chair:</b> V. Malinovsky	<b>TuE3:</b> Lasers and Quantum Emitters II <b>Session Chair:</b> J.P. Reithmaier	<b>TuF3:</b> SDM Transmission III <b>Session Chair:</b> R. Ryf
3:00 pm-3:30 pm	<b>COFFEE BREAK - Kohala Promenade</b>						
3:30 pm-5:00 pm	<b>TuA4:</b> Group IV Integration <b>Session Chair:</b> J. Witzens	<b>TuB4:</b> Transmission and Photonics <b>Session Chair:</b> T. Tanimura	3:30 pm- 4:45 pm <b>TuC4:</b> Novel Concepts in Topological Photonics I <b>Session Chair:</b> S.K. Ozdemir		<b>TuD4:</b> Enabling Photonic Technologies <b>Session Chair:</b> J. Howell	3:30 pm-5:20 pm <b>TuE4:</b> Active Media <b>Session Chair:</b> C. Gies	<b>TuF4:</b> Astrophotonics <b>Session Chair:</b> S. Leon-Saval

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<b>Room:</b>	<b>Waikoloa 1</b>	<b>King's 2</b>	<b>Kohala 2</b>	<b>Kohala 1</b>	<b>Kohala 3</b>	<b>Kohala 4</b>	<b>King's 3</b>
<b>Wednesday, 11 July</b>							
<b>8:00 am – 8:30 am</b>	<b>BREAKFAST - Kohala Promenade</b>						
<b>8:30 am – 10:00 am</b>	<b>WA1:</b> Modulators and Optical Combs for Sensing <b>Session Chair:</b> G. Capellini	<b>WB1:</b> Network Optimization <b>Session Chair:</b> C. Tremblay	<b>WC1:</b> Non-Hermitian, Topological, and Non-reciprocal Phenomena in Photonics and Optomechanics <b>Session Chair:</b> Sahin Ozdemir		9:00 am-10:00 am <b>WD1:</b> Space Communications <b>Session Chair:</b> M. Brodsky	9:00 am-9:50 am <b>WE2:</b> AMO/OE Interface I <b>Session Chair:</b> J. Mork	9:00 am-10:00 am <b>WF1:</b> Properties of Multi-Mode Systems <b>Session Chair:</b> R. Amezcua Correa
<b>10:00 am – 10:30 am</b>	<b>COFFEE BREAK - Kohala Promenade</b>						
<b>10:30 am – 12:00 pm</b>	<b>WA2:</b> III-V and IV Integration for Optical Sensing <b>Session Chair:</b> D. Paul	<b>WB2:</b> Telemetry and Learning <b>Session Chair:</b> Z. Zhu	11:00 am-12:00 pm <b>WC2:</b> Exceptional Points in Optics and Photonics <b>Session Chair:</b> D. Christodoulides		<b>WD2:</b> High-dimensional Entanglement <b>Session Chair:</b> K. Nemoto	10:30 am-12:20 pm <b>WE3:</b> AMO/OE Interface II <b>Session Chair:</b> C. Coleman	<b>WF2:</b> Nonlinear Spatial Diverse Systems <b>Session Chair:</b> I. Gasulla
<b>12:00 pm – 1:30 pm</b>	<b>LUNCH BREAK (ON OWN)</b>						
<b>1:30 pm – 3:00 pm</b>			2:00 pm-3:00 pm <b>WC3:</b> Topological Phenomena in Non-Hermitian Systems <b>Session Chair:</b> M. Bandres	<b>WG3:</b> Novel Platforms for Topological Photonics <b>Session Chair:</b> Y. Chong	<b>WD3:</b> Quantum Photonic Circuits <b>Session Chair:</b> A. Weiner		1:30 pm-3:15 pm <b>WF3:</b> SDM Components II <b>Session Chair:</b> R. Luis
<b>3:00 pm – 3:30 pm</b>	<b>COFFEE BREAK - Kohala Promenade</b>						
<b>3:30 pm – 5:00 pm</b>			3:30 pm-4:30 pm <b>WC4:</b> Novel Concepts in Topological Photonics II <b>Session Chair:</b> A. Khanikaev		3:30 pm-4:30 pm <b>WD4:</b> QIS at U.S. Army Research Laboratory <b>Session Chair:</b> W. Munro		4:00 pm-5:00 pm <b>WF4:</b> Panel Discussion: SDM and Beyond - An Opportunity for Cross-disciplinary Research <b>Session Chair:</b> J. Schroder