



AIM Summer Academy 2019 – July 22-26, MIT
Integrated Photonics: Fundamentals, Applications and Implementation
PIC Fundamentals Education Track

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	8-8:50 AM Registration, Welcome <i>S. Saini L.C. Kimerling</i>	8:30-10:20 AM Integrated Photonics: Active Devices <i>J. Liu</i>	8-8:50 PM Introduction to AIM PDK & MPW <i>E. Timurdogan</i>	8:30-10:45 AM PIC Fabrication: Process Variation and Design for Manufacturing <i>D. Boning</i>	8:30-11:20 AM Design Presentations Student Teams' Design Project Review
	9-10 AM Photonics Fundamentals <i>L.C. Kimerling</i>		9-11:15 AM PICs: Fabless Silicon Photonics Design Flow <i>S. Preble</i>		
	10-12 PM Integrated Photonics: Passive Devices <i>J.J. Hu</i>		10:30-12 PM Integrated Photonics: Chip Process Flow <i>L.C. Kimerling</i>	11-11:30 AM EPDA Tool Overview Mentor	
			11:30-12 PM EPDA Tool Overview Synopsys, Lumerical	11:30-12 PM Introduction to AIM TAP Facility <i>E. White</i>	
	Lunch 12-1 PM			Group Photo Lunch 12:10-1 PM	11:30-12:30 PM Conclusion - Education/Workforce - IPSR Roadmap <i>L.C. Kimerling</i>
Afternoon	1-1:30 PM EPDA Tool Overview Synopsys Lumerical	1-1:30 PM EPDA Tool Overview Synopsys Lumerical	1-2:20 PM Integrated Photonics Application: AR Imaging <i>M. Zirngibl</i>	1-2 PM Integrated Photonics Application: Sensing <i>B. Miller</i>	
	1:30-2:50 PM Integrated Photonics Application: Datacom <i>M. Glick</i>	1:30-2:50 PM Integrated Photonics Application: Wireless <i>D. Prather</i>	2:30-4:20 PM PIC Packaging <i>S. Preble</i>	2:30-4:20 PM PIC Optical & Electrical Testing <i>J. Cardenas</i>	
	3-3:30 PM Virtual Design Workshop <i>E. Verlage</i>	3-3:30 PM Workshop: Coventor <i>M. Hargrove</i>			
	3:30-6 PM Design Team Breakout Session <u>Define Problem</u> - Systems constraints - Figure of Merit	3:30-5:30 PM Design Team Breakout Session <u>Select Components</u> - Analog, Digital	4:30-6 PM Design Team Breakout Session <u>Plan Circuit Layout</u> - Performance - Layout constraints	4:30-6:30 PM Design Team Breakout Session <u>Finalize Design</u> - process integration	
			6-8 PM Networking Dinner (Catalyst Restaurant / Tech Square)		
Evening					