



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

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	8-8:50 AM Registration, Welcome S. Saini L.C. Kimerling	8-8:30 PM AIM PDK & MPW E. Timurdogan			
	9-9:30 AM EPDA Briefing Synopsis, Lumerical	8:30-9 AM EPDA Briefing Synopsis/Lumerical	8:30-9 AM EPDA Briefing Synopsis/Mentor	8:30-9 AM EPDA Briefing Mentor	8:30-11:20 AM Design Presentations
	9:30-12 PM EPDA Workshop PIC Device Design	9-12 PM EPDA Workshop PIC Circuit Simulation	9-10:50 AM EPDA Workshop PIC Circuit Layout	9-10:50 AM EPDA Workshop PIC Design Review Checking	Student Teams' Design Project Review
	<i>Tool Sequence:</i> A) Synopsis R-Soft (FEM, BPM) B) Lumerical MODE, FDTD	<i>Tool Sequence:</i> A) Synopsis OptSim B) Lumerical INTERCONNECT	<i>Tool Sequence:</i> A) Synopsis OptoDesigner B) Mentor Tanner L-edit	<i>Tool Sequence:</i> A), B) Mentor Calibre	
		11-12 PM EPDA Tool Overview Synopsis Mentor	11-11:30 AM EPDA Tool Overview Mentor		
			11:30-12 PM AIM TAP Facility E. White	11:30-12:30 PM Conclusion - Education/Workforce - IPSR Roadmap L.C. Kimerling	
Afternoon	Lunch 12-1 PM			Group Photo Lunch 12:10-1 PM	
	1-2 PM EPDA Tool Overview Synopsis Lumerical	1-2 PM EPDA Tool Overview Synopsis Lumerical	1-2:20 PM Integrated Photonics Application: AR Imaging M. Zirngibl	1-2:20 PM Integrated Photonics Application: Sensing B. Miller	
	2-3:20 PM Integrated Photonics Application: Datacom M. Glick	2-3:20 Integrated Photonics Application: Wireless D. Prather	2:30-3:50 PM PIC Optical & Electrical Testing J. Cardenas	2:30-3:50 PM PIC Packaging S. Preble	
	3:30-4 PM Virtual Design Workshop E. Verlage	3:30-4:15 PM Coventor Workshop M. Hargrove			
	4-6 PM Design Team Breakout Session <u>Define Problem</u> - Systems constraints - Figure of Merit	4:30-6 PM Design Team Breakout Session <u>Select Components</u> - Analog, Digital	4-5:45 PM Design Team Breakout Session <u>Plan Circuit Layout</u> - Performance - Layout constraints	4-6 PM Design Team Breakout Session <u>Finalize Design</u> - process integration	
Evening			6-8 PM Networking Dinner (Catalyst Restaurant / Tech Square)		