



AIM Summer Academy 2018 – July 23-27, MIT
Integrated Photonics: Fundamentals, Applications and Implementation
Applied PIC Design Education Track

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	8-8:50 AM Registration, Welcome (4-237) S. Saini L.C. Kimerling				
	9-9:40 AM EPDA Briefing Synopsis (4-265) Lumerical (4-257)	8:30-9:25 AM EPDA Briefing Synopsis (4-265) Lumerical (4-257)	8:30-9:25 AM EPDA Briefing Synopsis (4-265) Mentor (4-257)	8:30-9:10 AM EPDA Briefing (32-082) Mentor	8:30-11:30 AM Design Presentations (2-190)
	9:45-12 PM EPDA Workshop (4-349) PIC Device Design	9:30-12 PM EPDA Workshop (4-349) PIC Circuit Simulation	9:30-12 PM EPDA Workshop (4-349) PIC Circuit Layout	9:15-11 AM EPDA Workshop (32-082) PIC Design Review Checking <i>Tool Sequence:</i> A) Mentor Calibre B) Mentor Calibre	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	11-11:45 AM EPDA Tool Debrief/Overview (32-082) Mentor	
				11:45-12 PM Group Photo	11:30-12:30 PM Conclusion (2-190) - Education/Workforce - IPSR Roadmap L.C. Kimerling
	Lunch 12-1:15 PM (Virtual Lab Playtest, Mon-Weds)				
Afternoon	1:15-2 PM EPDA Tool Debrief/Overview Synopsis (4-265) Lumerical (4-257)	1:15-2 PM EPDA Tool Debrief/Overview Synopsis (4-265) Lumerical (4-257)	1:15-2 PM EPDA Tool Debrief/Overview Synopsis (4-265) Mentor (4-257)	1:15-2 PM EPDA Tool Overview (2-190) Cadence	
	2-4:40 PM Applications Tutorial (Basics): Datacom, RF Photonics, Sensing, Augmented Imaging (4-237) L.C. Kimerling A. Agarwal K. Wada D. Prather	2-3:20 Applications Tutorial (Advanced) (4-237) L.C. Kimerling et al.	2-3:50 PM PIC Packaging (2-190) S. Preble	2-2:30 PM Introduction to AIM TAP Facility (2-190) E. White	
	4:45-6 PM Design Team Breakout Session (4-163, 4-231, 4-257, 4-265) Define Problem	3:30-6 PM Design Team Breakout Session (4-163, 4-231, 4-257, 4-265) Select Components - Digital/Datacom - Analog/RF - Sensors - AR, 3D	4-6 PM Design Team Breakout Session (4-163, 4-231, 4-257, 4-265) Plan Circuit Layout - performance - constraints - options - PIC layout	2:30-4:20 PM PIC Optical & Electrical Testing (2-190) J. Cardenas	
				4:30-6 PM Design Team Breakout Session (4-163, 4-231, 4-257, 4-265) Finalize Design - process integration	
Evening			6-8 PM Networking Dinner (E52 – Samberg Conference Center)		