

AIM Photonics Academy
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 <i>S. Saini</i> <i>L.C. Kimerling</i>				
	9-12 PM EPDA Workshop PIC Device Design <i>Tool Sequence:</i> A) Synopsys (R-Soft) B) Lumerical (MODE, FDTD)	8:30-12 PM EPDA Workshop PIC Circuit Simulation <i>Tool Sequence:</i> A) Synopsys (OptSim) B) Lumerical (Interconnect)	8:30-12 PM EPDA Workshop PIC Circuit Layout <i>Tool Sequence:</i> A) Synopsys (OptoDesigner) B) Mentor (Tanner L-edit)	8:30-10:50 AM EPDA Workshop PIC Design Review Checking <i>Tool Sequence:</i> A) Mentor (Calibre) B) Mentor (Calibre)	
				11-12 PM EPDA Tool Overview Mentor	11:30-12:30 PM Conclusion - Education/Workforce - IPSR Roadmap <i>L.C. Kimerling</i>
Afternoon	Lunch 12-1 PM				
	1-1:50 PM EPDA Tool Overview Synopsys Lumerical	1-1:50 PM EPDA Tool Overview Synopsys Lumerical	1-1:50 PM EPDA Tool Overview Synopsys Mentor	1-1:50 PM EPDA Tool Overview Cadence	
	2-3:50 PM Tutorial: Datacom, RF Photonics <i>L.C. Kimerling</i> <i>D. Prather</i>	2-3:50 PM Tutorial: Sensing, Augmented Imaging <i>A. Agarwal,</i> <i>K. Wada</i>	2-3:50 PM PIC Packaging <i>S. Preble</i>	2-2:30 PM Introduction to AIM TAP Facility <i>E. White</i>	2:30-4:20 PM PIC Optical & Electrical Testing <i>J. Cardenas</i>
	4-6 PM Design Team Breakout Session <u>Define Problem</u> - Digital/Datacom - Analog/RF - Sensors - AR, 3D	4-6 PM Design Team Breakout Session <u>Select Components</u> - Digital/Datacom - Analog/RF - Sensors - AR, 3D	4-6 PM Design Team Breakout Session <u>Plan Circuit Layout</u> - performance - constraints - options - PIC layout	4:30-6 PM Design Team Breakout Session <u>Finalize Design</u> - process integration	
Evening			6-8 PM Networking Dinner		