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

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	8-8:50 AM **Registration, Welcome** (4-237) *S. Saini* *L.C. Kimerling* 9-9:50 AM **Photonics Fundamentals** (4-231) *L.C. Kimerling* 10-12 PM **Integrated Photonics: Passive Devices** (4-231) *J.J. Hu*	8:30-10:20 AM **Integrated Photonics: Active Devices** (4-231) *J. Liu* 10:30-12 PM **Integrated Photonics: Chip Process Flow** (4-231) *L.C. Kimerling*	8:30-10:50 AM **PICs: Fabless Silicon Photonics Design Flow** (4-231) *S. Preble* 11-12 PM **APSUNY PDK & MPW for Photonic Design** (4-231) *E. Timurdogan*	8:30-10:40 AM **PIC Fabrication: Design for Manufacturing** (4-231) *D. Boning* 11-11:45 AM **EPDA Tool Overview** (32-082) Mentor 11:45-12 PM Group Photo	8:30-11:30 AM **Design Presentations** (2-190) Student Teams' Design Project Review 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 Overview** Synopsys (4-265) Lumerical (4-257) 2-4:40 PM **Applications Tutorial (Basics):** ***Datacom, RF Photonics, Sensing, Augmented Imaging*** (4-237) *L.C. Kimerling* *A. Agarwal* K. Wada *D. Prather* 4:45-6 PM **Design Team Breakout Session** (4-163, 4-231, 4-257, 4-265) Define Problem	1:15-2 PM **EPDA Tool Overview** Synopsys (4-265) Lumerical (4-257) 2-3:20 **Applications Tutorial (Advanced)** (4-237) *L.C. Kimerling et al.* 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	1:15-2 PM **EPDA Tool Overview** Synopsys (4-265) Mentor (4-257) 2-3:50 PM **PIC Packaging** (2-190) *S. Preble* 4-6 PM **Design Team Breakout Session** (4-163, 4-231, 4-257, 4-265) Plan Circuit Layout - performance - constraints - options - PIC layout	1:15-2 PM **EPDA Tool Overview** (2-190) Cadence 2-2:30 PM **Introduction to AIM TAP Facility** (2-190) *E. White* 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)		