

Week 3: Custom circuits and physical design



Schedule

9:00 AM	Recap	Rajit Manohar
9:05 AM	Petri Net Primer	Alex Yakovlev
10:00 AM	Controller Design using Petri Nets	Alex Yakovlev
10:55 AM	<i>break</i>	
11:00 AM	Custom Circuit Design	Benjamin Hill
11:55 AM	<i>break</i>	
12:00 PM	Using commercial tools: digital standard cell flow	Ole Richter
12:30 PM	Using commercial tools: a mixed-signal flow	Filip Hormot
12:45 PM	Q&A	all
1:00 PM	End of Day 3	

Plan for today

- Custom gates
 - ❖ How do we systematically generate gates from the signaling requirements?
 - ❖ How do we go from gates to circuits for the cell library?
- Place and route flow
 - ❖ See summer school videos from 2022!
- Integration with commercial tools
 - ❖ Using your own digital standard cell library and commercial tools
 - ❖ Integrating asynchronous digital logic with analog circuits