



# PLL Design

## ON-LINE CLASS on Microsoft TEAMS

April 15-26, 2024

<b>WEEK 1</b>		<b>APRIL 15-19, 2024</b>			
<b>WEEK 2</b>		<b>APRIL 22-26, 2024</b>			
<b>DAILY</b>		Central European Time	Eastern Standard Time	Pacific Standard Time	India Standard Time
		<b>CET (Lausanne)</b>	<b>EST (New York)</b>	<b>PST (California)</b>	<b>IST (India)</b>
Module 1		3:00-4:30 pm	9:00-10:30 am	6:00-7:30 am	6:30-8:00 pm
Module 2		5:00-6:30 pm	11:00 am-12:30 pm	8:00-9:30 am	8:30-10:00 pm
<b>WEEK 1</b>	<b>Module</b>				
Monday, April 15	1	Fundamentals of Analog PLLs			Michiel Steyaert
	2	Interference Effects in PLLs			Michiel Steyaert
Tuesday, April 16	1 & 2	Spiral Inductor Interference, Deadzone and Phase Noise			Michiel Steyaert
Wednesday, April 17	1 & 2	VCO Design			Ali Hajimiri
Thursday, April 18	1 & 2	Jitter and Phase Noise in PLLs			Ai Hajimiri
Friday, April 19	1 & 2	Analog Fractional-N PLLs for Frequency Synthesis			Ian Galton
<b>WEEK 2</b>	<b>Module</b>				
Monday, April 22	1 & 2	All-Digital PLL Architecture and Implementation			Bogdan Staszewski
Tuesday, April 23	1	Digitally-Controlled Oscillator (DCO)			Bogdan Staszewski
	2	Time-to-Digital Converter (TDC)			Bogdan Staszewski
Wednesday, April 24	1	PLL Analysis and Modeling			Sam Palermo
	2	FDC-based Digital PLLs			Ian Galton
Thursday, April 25	1	PLL Building Blocks			Sam Palermo
	2	Clock Generation and Distribution in Wireline Systems			Sam Palermo
Friday, April 26	1	PLL-Based Clock and Data Recovery Systems			Sam Palermo