



## PLLs & Oscillators

EPFL, LAUSANNE, SWITZERLAND  
JUNE 17-21, 2019

---

### MONDAY, June 17

---

8:30-10:00 am	Fundamentals of Analog PLLs	Michiel Steyaert
10:30-12:00 am	Interference Effects in PLLs	Michiel Steyaert
1:30 -5:00 pm	Spiral Inductor Interference, Deadzone and Phase Noise	Michiel Steyaert

---

### TUESDAY, June 18

---

8:30-12:00 am	VCO Design	Ali Hajimiri
1:30 -5:00 pm	Jitter and Phase Noise in PLLs	Ali Hajimiri

---

### WEDNESDAY, June 19

---

8:30-12:00 am	All-Digital PLL Architecture and Implementation	Bogdan Staszewski
1:30-3:00 pm	Digitally Controlled Oscillator (DCO)	Bogdan Staszewski
3:30-5:00 pm	Time-to-Digital Converter (TDC)	Bogdan Staszewski

---

### THURSDAY, June 20

---

8:30-12:00 am	PLL Imperfections	Behzad Razavi
1:30-3:00 pm	Wideband PLL Design Study	Behzad Razavi
3:30-5:00 pm	Delay-Locked Loops	Behzad Razavi

---

### FRIDAY, June 21

---

8:30-12:00 am	Analog Fractional N-PLLs for Frequency Synthesis	Ian Galton
1:30-3:00 pm	FDC-Based Digital PLLs	Ian Galton

---