Remarque
June 24th to 28th, 2019. ROOM: ELA1 or ELA2.

Summary

Content
Day 1:
- MOS Transistor Modeling for Low-Voltage and Low-Power Circuit Design
- Basic Low-Power, Low-Voltage Circuit Techniques
- Differential Amplifying Blocks with Positive Feedback

Day 2:
- Noise Performance of Elementary Transistor Stages
- Stability of Operational Amplifiers
- Systematic Design of Low-Power Operational Amplifiers
- Important Opamp Configurations

Day 3:
- Important Opamp Configurations
- Bandgap and Current Reference Circuits
- Distortion in Elementary Transistor Circuits
- Low-Power Continuous-Time Filters

Day 4:
- Matching of MOS Transistors in Deep-Submicron
- Micropower ADCs

Day 5:
- Layout Considerations in Mixed-Signal Circuit Design
- Ultra-Low Voltage Analog Circuit Design

Note
* Organized by MEAD/EPFL
More informations & registration at: http://mead.ch/MEADNEW/low-power-analog-ic-design/
Contact: education@mead.ch

Keywords
Low-Voltage Analog, Op-Amps, Sigma-Delta Converters, Switched-Capacitor

Learning Prerequisites
Recommended courses
Resources

Ressources en bibliothèque

• Understanding Delta-Sigma Data Converters / Pavan
• Understanding delta-sigma data converters / Schreier
• Analog-to-Digital Conversion / Pelgrom
• Charge-Based MOS Transistor Modeling: The EKV Model for Low-Power and RF IC Design / Enz
• RF analog impairments modeling for communication systems simulation : application to OFDM-based transceivers / Smaini
• All-Digital Frequency Synthesizer in Deep-Submicron CMOS / Staszewski
• Structured Analog CMOS Design / Kayal
• Analog Design Essentials / Sansen
• Methodology for the Digital Calibration of Analog Circuits & Systems / Kayal