

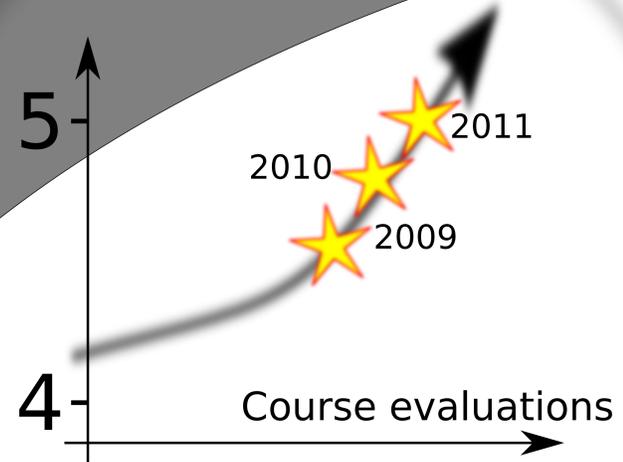
TSTE16 MIXED SIGNAL PROCESSING SYSTEMS (9+3 HP)

Electronics Systems



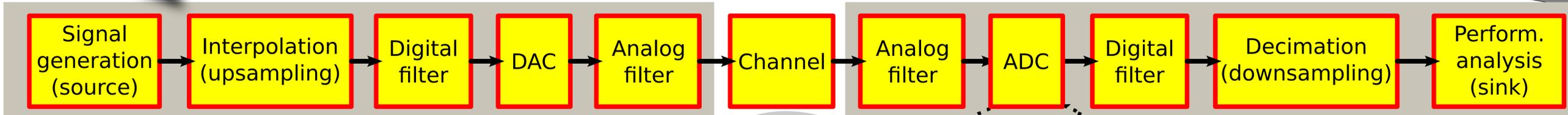
"The best course at ISY"

"I learned a lot"

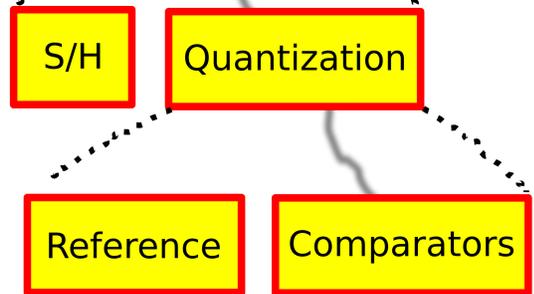
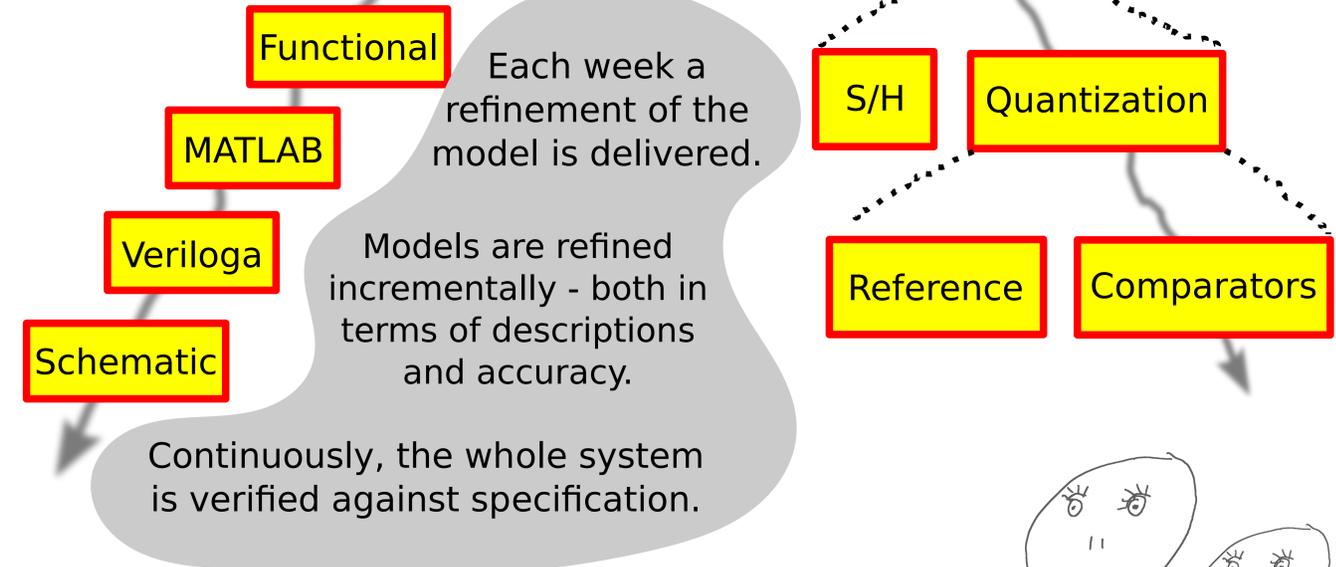


How are industrial, mixed-signal IC projects handled from requirement specification to delivery?
 How are intermediate deliveries handled?
 How do we deal with the customer's view?
 How do we know we meet the specification?

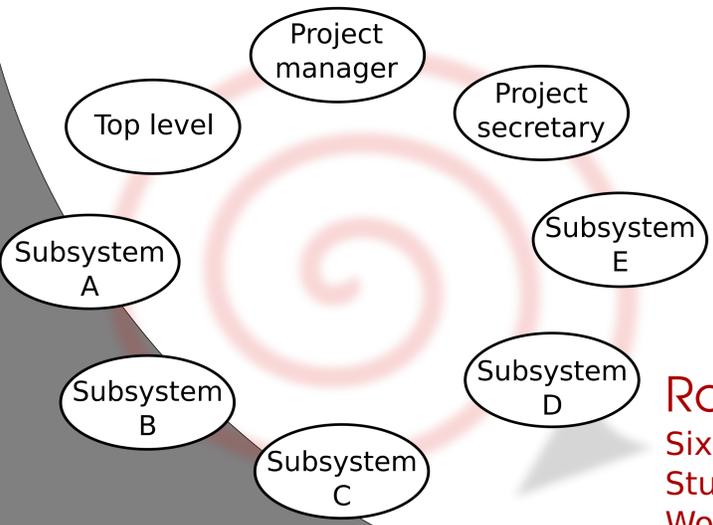
Developing a script-based, test/specification-driven iterative design methodology.
 Your partitioning of the system is verified in your top-level testbench.
 Happy hacking!



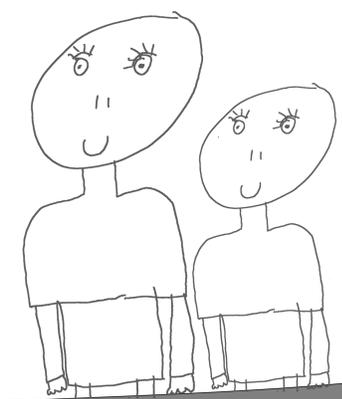
Transceiver chain mimicking a baseband communication system, such as e.g. ADSL.



Technical reporting
MATLAB spice/spectre
 Models **Test-driven**
 Mixed-signal Partitioning
 Iterations **Top-down**
 Baseband (de)modulation Scripting
Frequency planning
 Transceivers Incremental design
 Analog vs digital trade-offs
 Lot of simulation techniques



Rotational project model
 Six to eights students in each group.
 Students will enjoy all roles
 Work on all components (at different levels)
 How to hand over to next group
 How to efficiently document



Supervisors with > 20 years combined industrial experience within IC design



Linköping University
 INSTITUTE OF TECHNOLOGY

