



Contribution ID: 5

Type: **not specified**

Current Measurement: Digital Filtering Techniques

Tuesday 22 May 2012 09:40 (30 minutes)

The basics of quantization and sampling theory will be quickly reviewed and the digital filter problem introduced with emphasis on the specific requirements of measurement within digital control loops.

Design guidelines will then be outlined and tools for filter coefficients calculation presented also by means of interactive sessions.

The main focus of the tutorial will be on the most commonly used, though computationally demanding, FIR filters for Σ - Δ ADC. A case study will also be detailed in order to present critical issues.

Finally guidelines for IIR filters coding on DSP will be presented.

Presenter: MARTINO, Michele (CERN)