ID de Contribution: **10** Type: **Non spécifié**

Almost all about SAMPIC

mercredi 7 février 2018 14:15 (30 minutes)

The SAMPIC chip is based on the concept of the Waveform Time to Digital converter introduced in 2013. It permits performing high precision timing measurements on detector signals computed from the waveform digitized at a several GSamples/s rate over a window defined by a trigger which can be defined internally or sent from outside. Since the first version of SAMPIC that proved the WTDC concept, new versions, each integrating 16 independent channels, have been developed,
1) to fix bugs,
2) to introduce new functionalities like complex triggers, ancillary measurements or interfacing with digital signals
3) and above all to make its integration easier in a low power compact system by reducing the number of required external components and minimizing the digital electronics to drive it. After a general introduction on SAMPIC and on the mini DAQ system designed to operate it, the talk will focus on the new possibilities offered by the latest chip version and will report its performance measured in the laboratory.

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Classification de Session: Session 3