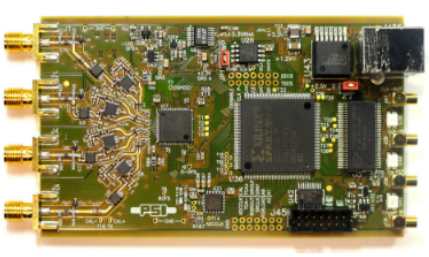

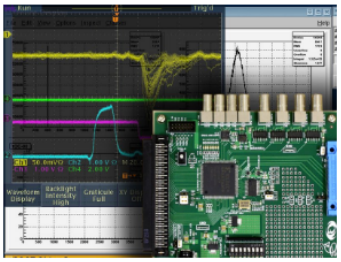

Contribution ID: **4** Type: **not specified**

Introduction: What is Real Time

Tuesday 19 July 2016 10:40 (1h 20m)

The lectures start with a definition of Real Time , its terminology and its applications in the different technical worlds from fundamental physiscs to the day to days life illustrated by typical examples.
Moving to the experimental Physics world, a short description of the basic fundamental detectors for vertexing, tracking, and calorimetry will be giving with their main electronics and read out features. Then, a little history of the trigger and data acquisition evolution over the last 30 years will be presented with simple examples (SPS-NA3, LEP-OPAL,TEVATRON CDF/DO) followed by some conceptual architectures for the future next linear colliders (ILC/CLIC).
In conclusion, it will be shown that modern state of that art read out architectures,tools and technologies could be applied to other fields from security scanners ,severe nuclear accident monitoring instrumentation to medical imaging systems like Positron Emission Tomography and particle therapy.

Presenter: LE DÛ, Patrick

Session Classification: Lecture