detector seminar

SPEAKER: Alessandro Marchioro

TITLE: **Transistors below 10 nm, and what to do with them in HEP**

DATE: 3 May 2019, 11:00

PLACE: 40-S2-A01 - Salle Anderson

ABSTRACT

As we are approaching transistors made with a small and countable number of atoms, fundamental physics is setting hard barriers that can not easily be overcome, but the microelectronics industry has repeatedly shown to be capable of spectacularly clever innovations to defeat such obstacles. This talk will review some of these achievements and take a look at some recent ideas in this industry to continue making smaller, lower power and hopefully cheaper transistors and also report about the most potentially disruptive future users of such technologies. HEP is not yet exploiting the potential of these technologies, and a few hints and guesses will be given on how our detectors systems could be made substantially more powerful by using them effectively.

Organised by: Burkhard Schmidt (EP-DT) and Philippe Farthouat (EP-ESE)