- Jornadas CPAN (22 Octubre 2020)

https://indico.ific.uv.es/event/4262/timetable/#20201022

- Jornadas futuros colisionadores (6-7 Octubre 2020)

https://indico.ific.uv.es/event/5365/timetable/#20201006.detailed

- Vertex2020 (5-8 Octubre 2020)

https://indico.cern.ch/event/895924/timetable/#20201005.detailed

- Jornadas tecnologicas del IFIC (14-15 Octubre 2020)

https://indico.ific.uv.es/event/4222/

CERN Detector Seminar on Friday 9 October at 11h00:

Towards a Reconfigurable CMOS Sensor suitable for Outer Tracking, Pre-shower and Digital EM Calorimetry at Future Facilities
by Prof. Philip Patrick Allport (University of Birmingham (UK))

https://indico.cern.ch/event/960851/

Abstract:
Developed out of work for CALICE and initially supported in the context of work for the FCC-hh, a small prototype CMOS sensor has been fabricated to prove the concept of a reconfigurable monolithic active pixel sensor which can deliver fast hit pixel counting for digital calorimetry, as well as tracking capability. In addition, physics performance simulation work comparing the capabilities of such a detector with an idealised analogue silicon-tungsten electromagnetic calorimeter have been performed. The prototype was designed at RAL and produced in the same technology as has also been used for the ALICE ITS upgrade ALPIDE CMOS sensor (from which the radiation-hard MALTA chip has been developed at CERN using a modified version of this technology with the same foundry). This modified process (with charge collection throughout the epitaxial volume dominated by drift) is both much faster as well as much more resistant to bulk damage from high fluences of charged and neutral hadrons. With help from the CERN team, RAL have now developed the capability to produce a new version of the prototype reconfigurable chip in this more radiation-hard technology with a view to proving suitability for use at future facilities with faster charge collection and/or high radiation requirements.

The seminar will be given via Zoom:
https://cern.zoom.us/j/95853827924?pwd=cVZKK1A1d0RkM1lMNkd6NVRMejBYUT09

Meeting ID: 958 5382 7924

Password: 373112