

Contribution ID: 316 Contribution code: FRXG2 Type: Invited Oral Presentation

Timepix and Medipix detectors and their applications

Friday, 12 May 2023 09:30 (30 minutes)

Medipix and Timepix are pixel-based technology detectors that can be employed to measure charged particles, photons (visible through gammas), and neutrons. Their readout chips are used at synchrotron light sources, and as mixed field radiation monitors on the International Space Station. Furthermore, clinical trials have started in the domain of medical spectroscopic X-ray radiology. The devices are used at CERN in experiments studying transition radiation, as detectors of anti-matter and as beam monitoring devices. This talk will provide an overview of the Medipix and Timepix devices and describe some applications. The last generation of Timepix 4, just made available, offers a time resolution of up to 200 picosec, space resolution of 55 micrometers and is can be tiled seamlessly to cover large areas.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Primary author: Dr CAMPBELL, Michael (CERN)

Presenter: Dr CAMPBELL, Michael (CERN)

Session Classification: MC06.4 - Beam Instrumentation, Controls, Feedback & Operational Aspects

(Invited)