Contribution ID: **75** Type: **Invited Talk**

XFEL Detector Developments

Wednesday 28 September 2016 11:30 (22 minutes)

In the last years a large development effort has taken place in the photon science community around the world to develop detectors for existing and upcoming X-ray free electron laser (XFEL) facilities. XFELs have very short X-ray pulses (˜100 fs) with a very high intensity (10ˆ12) and, depending on the facility a high repetition rate of up to 4.5 MHz. The detectors usually aim to achieve single photon sensitivity (i.e. require a very low noise) and a dynamic range of 10ˆ4-10ˆ5 photons. To achieve this conflicting requirements different concepts have been developed by the different groups. In this presentation I will give an overview over the different developments.

Author: MOZZANICA, Aldo (PSI)

Co-author: SCHMITT, Bernd (Paul Scherrer Institut)

Presenter: MOZZANICA, Aldo (PSI)

Session Classification: B10-Applications to medical and other fields

Track Classification: Applications to medical and other fields