

Photon Beam Diagnostics at SESAME

Wednesday 7 July 2021 10:45 (20 minutes)

Multiple systems of photon diagnostics are adapted at SESAME, in order to measure beam size and to observe the beam profile in various positions. One of the systems is the In-Air X-ray Detector (IAXD), which primarily depends on high-exposure imaging of the residual high energy x-rays that escaped after the photon absorber on the ends of the bending magnet ports. In addition to that, the Synchrotron Radiation Monitor (SRM) has been implemented in two techniques, the first is simply direct imaging of the monitor, the second is to adapt the interferometry technique to acquire beam size measurement. Other than that, Pinhole imaging system is currently being designed to be installed at cell 15, to provide precise measurement of both vertical and horizontal beam sizes through fitting formula of the obtained images.

Authors: AL KAILANI, Omar (SESAME); AL-MOHAMMAD, Hussein (SESAME)

Presenter: AL KAILANI, Omar (SESAME)

Track Classification: Photon beam diagnostic