1st oPAC Topical Workshop: Grand Challenges in Accelerator Optimisation



Contribution ID: 6

Type: not specified

Beam Instrumentation challenges

Wednesday 26 June 2013 14:45 (45 minutes)

Beam instrumentation encompasses all instruments that observe beam behaviour, providing "eyes" for machine operators. Good beam instrumentation is a must for safe and efficient accelerator optimisation. Today's main challenges lie in the request for unprecedented precision with positioning down to well below the micron level; dealing with high beam powers requiring non-invasive measurement techniques; and dealing with the ultra-fast implying measurements on femto-second timescales. All of this typically on a bunch by bunch basis requiring the efficient treatment of increasingly more data. This presentation will give an overview of these challenges and how they are currently being addressed.

Presenter: Dr JONES, Rhodri (CERN)