

The Birmingham Irradiation Facility

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At the end of 2012 the proton irradiation facility at the CERN PS will shut down for two years. With this in mind a new irradiation facility has been setup at Birmingham University. This uses a newly built high intensity area of a 26MeV proton cyclotron in the medical physics department. The facility can be used to irradiate silicon sensors, optical components and mechanical structures (e.g. carbon fiber sandwiches) for the LHC upgrade program. Irradiations of silicon sensors can be carried out, in a temperature controlled cold box that can be scanned through the beam. The facility is described in detail, along with the first tests carried out with mini (1 by 1 cm²) silicon sensors.

Primary author: DERVAN, Paul (University of Liverpool (GB))

Co-authors: CASSE, Gianluigi (University of Liverpool (GB)); Mr MARIN-REYES, Hector (University of Sheffield); Dr WILSON, John Allan (University of Birmingham (GB)); HODGSON, Paul (University of Sheffield (GB)); FRENCH, Richard (The University of Sheffield)

Presenter: FRENCH, Richard (The University of Sheffield)

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