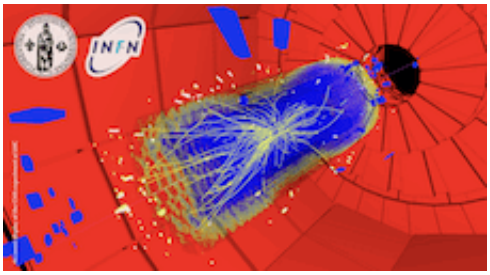

Contribution ID: **26** Type: **Talk**

Large-area high-quality polycrystalline Chemical Vapour Deposited diamond films as pixel detectors for Intensity Modulated Radiotherapy applications

Wednesday, 6 July 2011 16:40 (20 minutes)

We present first results of a project devoted to the development of a large-area modular detector for intensity modulated radiotherapy based on high –quality polycrystalline diamond produced by Chemical Vapour Deposition. The work is performed in the framework of the DIAPIX project of INFN CSN5. The proposed modular system is based on an electronic-grade quality polycrystalline diamond film, with area 2.5x2.5cm2 from Diamond Detectors Ltd, which has been metalized by University of Firenze on both sides to produce a matrix of pixels with approximately 1mm pitch. First results under radiotherapic beams of the pixilated device are reported.

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