Subject: PWO radiation damage overview Posted by Fritz-Herbert Heinsius on Mon, 09 Nov 2009 08:42:03 GMT View Forum Message <> Reply to Message

Dear Colleageues,

I would like to point your attention to the presentation of Francesca Nessi-Tedaldi (ETH-Zürich) "Studies of scintillating crystals for HEP calorimetry exposed to high hadron fluences" given last week at CERN:

http://indico.cern.ch/getFile.py/access?resId=0&materiaIId=slides&am p;confId=70004

Abstract:

High-precision calorimetry is facing a new challenge with the planning of a superLHC upgrade to collider and experiments. In particular, electromagnetic end cap calorimeters will be exposed to a high radiation environment and unprecedentedly large particle fluences. The evaluation of different scintillating crystals for coping with that environment is urgent for upgrade planning and possibly for further R&D that might be needed on photodetectors and general calorimeter design.

Performance results will be presented for Lead Tungstate, Cerium Fluoride and LYSO crystals exposed to high charged hadron fluences. Qualitative studies to attempt understanding the nature of hadron-specific performance changes will also be shown.

Best regards, Fritz-Herbert