Contribution ID: **16** Type: **not specified**

Radiation hardness study of CsI(Tl) crystals for Belle II calorimeter

Monday 22 August 2016 17:20 (20 minutes)

The Belle II calorimeter (at least, its barrel part) consists of CsI(Tl) scintillation crystals which have been used at the Belle experiment. We perform the radiation hardness study of some typical Belle crystals and conclude their light output reductions are acceptable for Belle II experiment where the absorption dose can reach 10 krad during the detector operation. CsI(Tl) crystals have high stability and low maintenance cost and are considered as possible option for the calorimeter of the future Super-Charm-Tau factory (SCT) at BINP. Our study also demonstrates sufficiently high radiation hardness of CsI(Tl) crystals for SCT conditions.

Primary author: Mr MATVIENKO, Dmitry (BINP)

Presenter: Mr MATVIENKO, Dmitry (BINP)

Session Classification: Young Scientists' Forum

Track Classification: Detector design and technologies