



Contribution ID: 152

Type: **Oral presentation**

OPTIMIZATION OF AN HYBRID POSITRON SOURCE USING CHANNELING

Tuesday, 27 September 2016 17:35 (15 minutes)

The advantages of the hybrid positron source using channeling radiation, related to the yield, the converter heating and the Peak Energy Deposited Density (PEDD) in the converter, made it to be chosen as the baseline for CLIC. An optimization study concerning the positron converter –a granular target made of small tungsten spheres- has been worked out. The simulation results show that the energy deposition and the thermal shocks are considerably reduced. Applications to CLIC and ILC have been carried out. Tests have been performed in autumn 2015 at KEK. Both simulations and experimental results are reported.

Primary author: Dr CHEHAB, Robert (LAL/IN2P3)

Presenter: Dr CHEHAB, Robert (LAL/IN2P3)

Session Classification: S1.4: Channeling & Radiations in Crystals