Contribution ID: 29 Type: not specified

## **Detecting diffraction at the LHC**

## Abstract

Photon bremsstrahlung is proposed to be used to identify elastic proton-proton interactions at the LHC. In addition to a measurement of the elastic pp cross section (assuming that the elastic slope is known), the bremsstrahlung photons will allow the evaluation of the total pp cross section, luminosity and to align the Zero Degree Calorimeters (ZDCs).

Primary author: Prof. ORAVA, Risto (Helsinki Inst. of Physics and Univ. of Helsinki, CERN)

Co-authors: Prof. LÄMSÄ, J.W. (Iowa State Univ.); Dr RYSKIN, M.G. (Petersburg Nucl.Phys.Inst.); Prof.

KHOZE, V.K. (IPPP,Dept.of Physics, Durham Univ.)

Presenter: Prof. ORAVA, Risto (Helsinki Inst. of Physics and Univ. of Helsinki, CERN)

Track Classification: LHC and post-LHC