

Abstract Submitted  
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**Testing a luminosity detector for the BRAN project at the LHC**

JOHANNES STILLER, LUMI TEAM<sup>1</sup> — Two pairs of segmented ion chambers, called BRAN, are used at CERN's LHC. One pair is located at the ATLAS interaction region while the other is at CMS. The detector itself is a pressurized gas ionisation chamber. It is segmented into four multi-gap quadrants which are able to function independently. This device will measure the bunch by bunch luminosity and crossing angle of the beam at both locations. Recently, the device was tested at CERN's SPS with 300 GeV protons using its final electronic design. The performance of the BRAN was studied as a function of pressure, absorber thickness, and voltage. We have compared these test results to that of Monte Carlo simulations. These results as well as the current status of this detector will be presented.

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