

# REPORT ON JINST\_022P\_0513

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AUTHOR(S): V. HALYO, A. HUNT, P. JINDAL, P. LEGRESLEY, P. LUJAN

TITLE: GPU Enhancement of the Trigger to Extend Physics Reach at the LHC

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## Referee report

Most of the comments made on the first report have been addressed and the last cover letter from the authors clarifies other issues related to the comments made.

Regarding the comment made in the first report "For the results presented in figure 4, how much hit data etc. was actually buffered in the GPU? How does this compare to what would be required for the current CMS tracker? What would be the impact of I/O on the performance figures reported in figure 4?", is there any reason why the numbers reported in the cover letter could not be incorporated into the text? This I believe would add to the text. More specifically, add a suitable reworded version of this text into the document: "e.g. I would add an extreme case of pile up of about 100 we would expect about 5000 tracks. I would also assume that the number of hits per track are about 15 which is more than average. This will yield to about 4.5 MB of MEM needed if we use double precision. This amount of MEM is far less than 6GB available by the current GPU."

Regarding the results presented in Fig. 5, the efficiency and purity achieved should be stated? I apologise for not making this comment in the first report.