

L19. "with a separation between 1.6 mm and 4 mm."

→ "with a separation that varies between 1.6 mm and 4 mm according to the position of the module in the detector"

L 21. If we add (2S) after the words "contain two strips" it is clear what the 2S abbreviation stands for.

L24. "2S" → 2S

Comment: Either we keep apostrophes for the PS as well or we drop them

L76. "The outer dimensions of the 2S sensors are ~ 10 cm x 10 cm," → The outer dimensions of the 2S sensors are ~ 10 cm x 10 cm with the strips segmented in two individual parts of 5 cm each one and read out on opposite sides of the sensor. The PS-p sensor...

Figure 4. For some reason the Neutron curve (Neutrons Z=0 cm) stops at Radius r=20 cm. while in ref [16] it extends beyond r=100 cm

L168. The bias ring on the top-side (see Figure 3) of the sensor...

Figure 6. When you write (pre-convoluted) I suppose that you mean the "recorded pulse height distribution "

Lines 261-262: "The thinned mini-sensors show a higher leakage current, which might be related to the thinning process."

Comment: As this is central to the paper and to our final choice of sensors, is there any other evidence, reference etc for similar behavior of thinned sensors in other experiments?

Figure 9. Question : Why there are two points for any measured fluence in the plot?

Table 10. "The interstrip parameters were only measured on short strip sensors and the measurements" → "The interstrip parameters were only measured on short strip sensors and **their** measurements" →

L 296. "To complement the measurements on miniature strip sensors, also four full-size FZ290 sensors" → "To complement the measurements on miniature strip sensors, also four **2S** full-size FZ290 sensors"

Question: The 2S sensors were uniformly irradiated over their entire surface?

L311-312. "and also the leakage currents are similar if the. operation voltage is adjusted based on the thickness." → "**and leakage currents are comparable if the operation voltage is adjusted to the thickness**"

L315. "A setup like the one..." → "A **table bench laboratory** setup like the one... "

Figure 17. comment : ...**thFZ240** and **-.-.thFZ240** lines are overlapping and not well distinguished.

Additional Remarks:

- Pictures with dimensions of short and miniature sensors will help in better reading the manuscript
- In our TDR we show that 240 μm with deep-diffusion is the best choice. In our paper we do not explain why this approach is abandoned.
- Instead of Figure 2 it would be better to insert Figure 3.6 from the Phase II Tracker TDR, which describes both 2S and PS modules.
- Figure 5. Too much information that I cannot easily digest (my inability)
- While lines 121-125 explain well what Table 4 represents, do you think that an additional column with three rows 1000 , 3000, 4000 (in fb^{-1}) would better clarify the table?