

The following document contains the comments from the authors to the reviewers for the paper "A new D-T neutron facility at UCT", SAIP2017 (ID: 186)

Note: all recommended corrections have been implemented.

**Reviewer 1:**

*"A description of a fast neutron generator installation and continuous characterization also in terms of safety aspects are described."*

*The text should be written in the Third Person. (eliminate "we" in numerous occasions within the text.)*

**This has been changed throughout.**

*4. Experimental capabilities:*

*Line 4: "...collimator with a small aperture to produce a narrow beam...". If possible describe the collimator in terms of size and composition to perform its function - maybe a reference to this specific layout - for both collimators.*

**Collimator description included with dimensions and compositions.**

*Similar at the last sentence of the same paragraph:*

*"a borated HDPE beam dump to thermalise and absorb the neutrons".*

*The beam dump is essential to minimise the neutron and photon scatter in the experimental chamber. Describe the composition of the beam dump as only borated HDPE is not enough to eliminate the scatter of neutrons and photons. If the beam is trapped it should be mentioned. .*

**Composition and purpose of beam dump has been clarified.**

*C5: Commissioning and Current Status:*

*"The thermal neutron rate was measured to be...."*

*- Indicate the position of measurement of the Gamma-ray dose as well as neutron flux.*

**This has been clarified in the text.**

*C6: References*

*[3] [9]: replace ,(comma) between last two co-authors with a "and"*

**Changed**

*Other notes:*

*The anticipated life time of the accelerator should be mentioned somewhere in the script."*

**This has been added in section 3, when discussing the useable accelerator hours.**

**Reviewer 2:**

*Requests for corrections are entered as “STICKY NOTES” in the PDF version of the article. Excellent work, with maybe 2 minor flaws plus a more serious matter: the fluence-rate to dose rate conversion factors (FR-DR-CFs) used in the MCNP calculations were taken from ICRP-21(1973) which is an obsolete source. Please use FR-DR-CFs from ICRP-116 (2010) – the replacement for ICRP-21.*

**All corrections made as directed by the “sticky notes” from the reviewer. The simulations have been re-run with the updated ICRP dose conversion factors, and all necessary areas in the text altered.**