Contribution ID : **25** Type : **Poster**

X-rays for space qualification tests

Frying chips on IMBL

As part of the newly founded Australian National Space Qualification Network (**NSQN**). **ANSTO** is building several capabilities to test and qualify electronic systems destined to fly on space craft.

The radiation environment in space is highly varied in species and energy, all potentially damaging to electronics. By using **IMBL** on the Australian Synchrotron along with **ANTARES** and **GATRI** at the Lucas Heights campus, we are providing x-ray, proton, and gamma ray radiation test facilities designed to qualify circuits and chips for flight.

Although x-ray tests are unusual in this field. The ability to perform radiography, and the penetrating nature of these photons do have some advantages. We are pursuing these using **IMBL** and are happy to report that we have been successful in causing several **CMOS** chips to stop working with precisely known doses of radiation!

Level of Expertise

Experience Researcher

Presenter Gender

Man

Pronouns

He/Him

Do you intend to attend UM2022

In person - Melbourne

Students Only - if available would you be interested in student travel funding

Students Only – Do you wish to take part in the Student Poster Slam

Terms and conditions (Please confirm that you have read all the requirements and agree to the conditions)

Yes

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