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Radiation test of Rad-Hard ICs for space applications

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Conventional Integrated Circuits (IC) are highly sensitive to radiation effects and can operate only in environments with a very low level of radiation. High radiation environments such as space need custom-designed ICs with dedicated radiation-hardened architectures. Our research is focused on the development and test of radiation-hardened ICs in nanoscale and ultra-low-power semiconductor technologies for high radiation environments such as in space and particle physics experiments. The University of Melbourne and Ansto developed a strategic collaboration to enable the ANSTO's heavy ion microprobe beamline for radiation test of custom-designed ICs for space applications. In our presentation, we provide an overview of our collaboration outcome and our roadmap for further developments in future.

Presenter Gender

Man

Do you wish to take part in the Student Poster Slam

Condition of submission

Yes

Students Only - Are you interested in AINSE student funding

Level of Expertise

Expert

Pronouns

Which facility did you use for your research

Centre for Accelerator Science

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