

18th International School on the Effects of Radiation on Embedded Systems for Space Applications (SERESSA)

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Organizers:



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Modelling and prediction of Single Event Transient and Single Event Upset

Monday 5 December 2022 16:20 (50 minutes)

Neutrons, protons and ions are particles are able to trigger Single Event Upset in modern technologies. In this talk, we'll see how these particles can interact with the matter of the electronic device, create some electron-pairs in the semiconductor and how the resulting parasitic current can lead to an SEE. We will also present the key parameters that are required in order to evaluate the sensitivity of a given technology. The main quantities such as fluence, flux, cross section will be explained, and some case studies will be presented.

Presenter: WROBEL, Frédéric