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



Contribution ID: 17 Type: not specified

Error rate prediction for programmable circuits: methodology, tools and studied cases

Monday 5 December 2022 15:30 (50 minutes)

Perturbations provoked by Single Event Upsets (SEUs) increase with the reduction of transistor's features. In this talk will be presented a strategy allowing to estimate SEU error-rates based on a limited radiation ground testing and fault injection results. A flexible and versatile test platform, well suited to implement such a strategy will be described. Experimental results obtained for different processors illustrate the accuracy of error rate predictions.

Presenter: VELAZCO, Raoul (TIMA)