

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

SERESSA 2022

Organizers:



Contribution ID: 18

Type: **not specified**

The Value of “Test-As-You-Fly”: Modernizing FPGA Experimentation And Data Analysis for Critical Space Missions

Wednesday 7 December 2022 10:10 (1 hour)

New methods for characterizing FPGA performance in radiation environments are presented. Application of the new methods are illustrated via walking through FPGA manufacturer Single Event Data and how they are used to calculate system-level error rates for various space environments. This presentation shows that old test and evaluation methods are insufficient while new methods provide better characterization and assistance for determining suitable design/mitigation strategies for space missions.

Presenter: BERG, Melanie (Founder/CEO of Space R3 LLC)