

12th International School on the Effects of Radiation on Embedded Systems for Space Applications, (SERESSA'2016), Montreal, Canada

November 7 – November 10

Final Program

	Monday	Tuesday	Wednesday	Thursday
8:00 – 9:00	Registration	Registration (session starts at 8:30)	Registration (session starts at 8:30)	Registration
9:00 – 10:30	Opening Remarks P. Fouillat (IMS, France) & R. Velazco (TIMA, France) Opening Local Chair C. Thibeault (ETS, Canada) Technical Program Overview O. Ait Mohamed (Concordia Univ., Canada) Single Event Effects (SEE): Mechanisms and Classifications S. Buchner (NRL, USA)	Space Activities, Current Projects and Strategic View in Canada E. Gloutnay (CSA, Canada) Nanosatellites Future in France M. Barthelemy (CSUG, France) System Hardening and Real Applications M. Pignol (CNES, France)	Radiation Effects Hardness Assurance S. Buchner (NRL, USA) COTS in Space: Constraints, Limitations and Disruptive Capability M. Pignol (CNES, France)	New Developments in FPGA: SEUs and Fail-Safe Strategies From the NASA Goddard Perspective M. Berg (NASA, USA)
10:30-11:00	Break & Poster Session	Break & Poster Session	Break & Poster Session	Break & Poster Session
11:00-13:00	Electrical, Electronic and Electromechanical (EEE) Parts in the New Space Paradigm: <i>When is Better the Enemy of Good Enough?</i> K. A. LaBel (NASA, USA) Space and Earth Radiation Environments. M. Famá (ARSAT, Argentina)	On-Board-Computer of a Nanosat Built With COTS Circuits A. Parra (BBS, Argentine) Introduction to radiation induced nanoelectronic transport degradation. I.S. Esqueda (University of Southern California, USA)	Development of a Hardened 150nm Standard Cell Library JB. Dos Santos (SMDH / UFSM, Brazil) Hardening-by-Design Techniques for Analog and Mixed-Signals D. Loveless (University of Tennessee, USA)	SEE Effects in FPGA: Modeling and Experimental Characterization C. Thibeault (ETS, Canada) Mitigating SEU and MBU Using Backward Error Recovery Approach in SRAM Based FPGA F. Ghaffari (ETIS, France)
13:00 – 14:00	Lunch	Lunch	Lunch	Lunch
14:00 – 16:30	Single Event Effects Test Methods K. Tapero (RISI, Russia) Accurate Abstraction and High Level Modeling and Validation of SEE in Electronic Systems, O. Ait Mohamed (Concordia Univ., Canada) and Y. Savaria (Polytechnique Montréal, Canada).	Fault Injection Methodologies L. Entrena (UCIII, Spain) Fault Injection Methodologies - Practical Aspects M-A. Aguirre (University of Sevilla, Spain) Laser Testing Laser Simulation Test Possibilities and Facilities D. McMorrow (NRL, USA) and P. Fouillat (IMS, France)	Industrial visit + Gala Diner	Microprocessor Testing: Characterization Tests, Mitigation H. Quinn (LANL, USA) RADARSAT II PowerPC 603e Processor; SEU Mitigation and on Orbit Results H. Rufenacht, P. Allan and C. Decoust (MDA, Canada)
16:30-17:00	Break & Poster Session	Break & Poster Session		Break & Poster Session
17:00-18:00	End of the First Day	SEE Effects on VLSI Devices (ASIC and FPGA) L. Sterpone (POLITO, Italy)		Error-Rate Prediction For Programmable Circuits: Methodology, Tools and Studied Cases & Concluding Remarks R. Velazco (TIMA, France) P. Fouillat (IMS, France)