



2025 Program Agenda

Monday, May 12, 2025

Time (PST)	Session	Title	Speaker	Organization
11:00 AM	Registration, 11:00 AM to 4:00 PM (upstairs) and 5:00 to 7:30 PM (Soledad Ballroom, downstairs)			
1:00 PM	Welcome to SEEMAPLD	Workshop Opening Remarks	Krysten Pfau	Lockheed Martin
1:05 PM		SEE Technical Program Introduction	Justin Likar	JHU / APL
1:10 PM	Session Introduction, Chair: George Tzintzarov, The Aerospace Corporation			
1:20 PM	Pulsed Laser Single Event Effects	Pulsed-Laser Single-Event Latchup (PL SEL) Screening	Joel Hales	U.S. Naval Research Laboratory
1:40 PM		Universal Approach to Measuring Focused Beam Size in Pulsed-Laser SEE Testing	Trevor Crane	U.S. Naval Research Laboratory
2:00 PM		Northrop Grumman Pulsed Laser Single Event Effects (PL-SEE) Facility and Recent Results	Jeff Warner	Northrop Grumman Corporation
2:20 PM		SET setups at the Australian and Canadian Pulsed Laser Facilities in the Chase of the Critical Parameters for Direct Comparison	Jacob Wright	University of Wollongong
2:40 PM	Break (20 Minutes)			
3:00 PM	Session Introduction, Chair: Will Rudge, The Rad Team			
3:10 PM	Environments & Facilities Methods & Techniques	Advancing Space Electronics - Development of a Dedicated High Energy Proton Accelerator for Single Event Effect Testing	Ben Frank, Payton Kramer	Quantum Catalyst, SpaceX
3:30 PM		System Approaches to Proton Radiation Testing	Ralph Grundler	Aitech
3:50 PM		Pulsed Electron Beams as Surrogates for Heavy-Ion Single-Event Transient Testing	Michael Hu	Vanderbilt University
4:10 PM		Deployment of the Single-Event Effects Test Training Platform (LabRaTTS)	Adrian Skudrinja	Arizona State University
4:30 PM		Invited Talk: The Problem with SEE and Databases: An Exposition on Quality of Data	Ken LaBel	Trusted Strategic Solutions, LLC
5:00 PM	Welcome reception and registration (Soledad Ballroom)			
7:30 PM	End of Events for Monday, May 12			

SEE/MAPLD 2025 Program Agenda

Tuesday, May 13, 2025

Time (PST)	Session	Title	Speaker	Organization
7:30 AM	Registration, 7:30 AM to 5:00 PM			
8:30 AM	Environments & Facilities: High Energy Heavy Ions	Session Introduction, Chair: James (Jake) Carpenter, Indiana University		
8:40 AM		HEHISEE Placeholder	Matt Bedel Ken LaBel	NSWC Crane, Trusted Strategic Solutions, LLC
9:00 AM		RADNEXT - Building a Network of Irradiation Facilities for SEE Testing	Gerd Datzmann	Datzmann Interact & Innovate
9:20 AM		HEARTS@CERN: A Very-High-Energy Heavy Ion Facility for Electronics Testing	Natalia Emriskova	CERN
9:50 AM	Break (30 Minutes)			
10:20 AM	Environments & Facilities: High Energy Heavy Ions	Long-term Trends at the 88-Inch Cyclotron BASE Facility	Mike Johnson	Lawrence Berkeley National Laboratory
10:40 AM		LBNL 88-Inch Cyclotron BASE Facility User Log Insights	Alex Donoghue	Lawrence Berkeley National Laboratory
11:00 AM		TAMU K150 Cyclotron Upgrade Project	Henry Clark	Texas A&M University
11:20 AM		TBD	TBD	TBD
11:40 AM	Lunch (1 Hour, 30 Minutes)			
1:10 PM	ASSERT Special Session	Session Introduction, Chair: Adalin Benedetto, Alphacore, Inc.		
1:20 PM		PEARCE: Pulsed Electrons for Alternative Radiation effects Characterization of Electronics – An Update	George Tzintzarov	Aerospace Corporation
1:40 PM		Single-event Test Effects by Lab Laser Accelerated Radiation Beam (STELLARBeam)	Matthew Solt	Northrop Grumman Corporation
2:00 PM		PIXEL Update: A Compact Pulsed X-ray Source Facility for SEE Testing	Arielle Little	The Aerospace Corporation
2:20 PM	Break (30 Minutes)			
2:50 PM	Basic Mechanisms and Modeling	Session Introduction, Chair: Adrian Ildefonso, Indiana University		
3:00 PM		Invited Talk: From CREME to SIRE2: A Brief History	Jim Adams	Fifth Gait Technologies, Inc.
3:30 PM		Investigation of Single Event Transients on Monolithic 3D Integration Technology	Salman Emre	Stony Brook University
3:50 PM		Prediction of Radiation Induced Failures On Integrated Circuits Using Multiphysics Approach	Ashok Alagappan	Ansys
4:10 PM		Invited Talk: Bounding SEL Rates with Historical Data: Comparing CREME96 vs. Figure of Merit	Ray Ladbury	NASA GSFC
4:40 PM	Novel Applications & Case Studies	The Evolution of the Texas A&M Single Event Effects Bootcamp: Advancing Education and Workforce Development in Radiation Effects	Greg Allen	NASA JPL
5:00 PM	End of Events for Tuesday, May 13			

SEE/MAPLD 2025 Program Agenda

Wednesday, May 14, 2025

Time (PST)	Session	Title	Speaker	Organization
7:30 AM	Registration, 7:30 AM to 5:00 PM			
8:30 AM	Tutorial	Mod 00: FPGA SEE Test Beam Planning and Ensuring Test Validity	Daniel Loveless	Indiana University
9:40 AM	Break (20 Minutes)			
10:00 AM	Session Introduction, Chair: Greg Allen, JPL			
10:10 AM	SEE Simulation, Data Analysis Techniques & Event Rate Computations	Dynamic Time Warping for ASET Cluster Analysis	James Carpenter	Indiana University
10:30 AM		A Survey of Depth-Parameter Selection in Upset-Rate Calculations	Dave Hansen	L3 Harris
10:50 AM		SEE Rate Prediction for FinFETs	Gary Swift	XRTC + Swift Engineering & Radiation Services
11:10 AM		Design of Experiments Applied to the Single-Event Upset-Rate Equation	Dave Hansen	L3 Harris
11:30 AM	Lunch (1 Hour, 40 Minutes)			
1:10 PM	Session Introduction, Chair: Ed Carlisle, Graf Research			
1:20 PM	Combined	Single Event Upset Characterization of the Versal while running Deep Neural Network Image Segmentation Algorithms	Nelson Hu	MDA Canada
1:40 PM		Proton SEE Characterization of Nexus CertusPro-NX FPGA Implementing GRLIB LEON3FT-based System-on-Chip	Lucas Antunes Tambara	Frontgrade Gaisler
2:00 PM		Impact of Single Event Upsets on Deep Neural Networks	Trevor Peyton	Indiana University
2:20 PM	Session Introduction, Chair: Nelson Hu, MDA Canada			
2:30 PM	Break (30 Minutes)			
3:00 PM	FPGAs, PLDs & New Devices	The Next Step in MRAM Integration	Bryan Taylor	Avalanche Technology
3:20 PM		FPGAs and RISC-V® Enabling High-Performance Spaceflight Computing	Minh Nguyen	Microchip Technology
3:40 PM		GR765: A Radiation-Hardened, Fault-Tolerant Octa-Core SoC with Integrated eFPGA for Next-Generation Space Avionics	Lucas Antunes Tambara	Frontgrade Gaisler
4:00 PM		Ra: Long-Range FPGA Streaming and Dynamic Partial Reconfiguration Over LoRa with RISC-V MicroBlaze Watchdog	M. El-Hadedy	California Polytechnic University, Pomona
4:20 PM		RTIMS FLASH: 64 Gbit Radiation Intelligent Memory Stack for Data Handling applications	Timothee Dargnies	3D PLUS
4:40 PM	Break (40 Mins)			
5:30 PM	Industrial Exhibits and Reception, 5:30 to 8:00 PM Raffles: 3D PLUS, Alphacore, ProNova Solutions, Sage Analytical Lab			
8:00 PM	End of Events for Wednesday, May 14, 2025			

SEE/MAPLD 2025 Program Agenda

Thursday, May 15, 2025

Time (PST)	Session	Title	Speaker	Organization
7:30 AM	Registration, 7:30 AM to 5:00 PM			
8:30 AM	Novel Applications & Case Studies	Session Introduction, Chair: David Merodio-Codinachs, ESA		
8:40 AM		An Assurance Workflow for Commercial Third-Party Processor IP	Jagadish Nayak	Cycurity, Inc.
9:00 AM		SEE Fault Generation and Coverage for Safety Critical FPGA designs	Kamesh Ramani	Siemens EDA
9:20 AM		Post-Irradiation Fault Injection for Complex FPGA Designs	Mike Wirthlin	Brigham Young University
9:40 AM	Break (30 Minutes)			
10:10 AM	Tutorial	Mod 01: Overview of FPGAs / SOCs and SEE Testing	Ken LaBel	Trusted Strategic Solutions, LLC
10:40 AM	Tutorial	Mod 02 (Part 1): Test Approach 1: Block (IP)-oriented SEE Testing	Mike Wirthlin	Brigham Young University
11:40 AM	Lunch (1.5 Hour)			
1:10 PM	Tutorial	Mod 02 (Part 2): Test Approach 1: Block (IP)-oriented SEE Testing	Mike Wirthlin	Brigham Young University
1:30 PM	Tutorial	Mod 03: Test Approach 2: Application-oriented SEE Testing	Heather Quinn	US Space Force
3:00 PM	Break (20 Minutes)			
3:20 PM	Tutorial	Mod 04: Planning a SEE Test for FPGAs	Justin Likar	JHU APL
4:00 PM	Tutorial	Mod 05: Considerations for Building a FPGA Test Set	Zac Diggins	Nucleon
5:00 PM	Break (30 Minutes)			
5:30 PM to 8:00 PM	Poster Session & Career Networking Happy Hour, 5:30 PM - 8:00 PM			
	Proton and Heavy ion Characterization of Candidate System-on-Modules for Lunar Applications		Leo Coic	TRAD
	NASA Parts Engineering School		Dori Gallagher	NASA JPL
	FPGAs should be forbidden in space applications until the designers learn how to design with them		Adam Taylor	Adiuvo Engineering
	Opportunities and Updates for Proton Testing at ProNova Solutions		Casey Corbridge	ProNova Solutions
	200 MeV Proton Radiation Effects Testing Facility		Michael Fogle	Auburn University
	Ethernet PHY Heavy Ion SEE Radiation Test Results		Matt Von Thun	Frontgrade Technologies
	MRAM Heavy Ion Test Results		Matt Von Thun	Frontgrade Technologies
	HEARTS@CERN		Ruben Garcia Alia	CERN
8:00 PM	End of Events for Thursday, May 15			

Friday, May 16, 2025

Time (PST)	Session	Title	Speaker	Organization
7:30 AM	Registration 7:30 to 11:00 AM			
8:30 AM	Tutorial	Mod 06: Exercise: Role Playing SEE Test "Simulation"	Codie Mishler	Northrop Grumman Corporation
10:00 AM	Break (step out when needed)			
11:00 AM	Tutorial	Mod 07: Applying SEE FPGA Data to Mission Risk Analysis	David Merodio-Codinachs	ESA
12:00 PM	End of Events for Friday May 16 and End of Workshop			