



Figure: TUM Campus Garching
source: Uli Benz / TUM

SERESSA 2017

13th International School on the Effects of Radiation on Embedded Systems for Space Applications

Spectrum Aerospace Technologies
LRT & LRR Technical University Munich
Leibniz Supercomputing Center
Garching b. München, Germany

October 23rd-October 26th, 2017

<http://seressa.in.tum.de>

CALL FOR PARTICIPATION

This four-day school SERESSA combines academic, government, and industrial communities working in the area of radiation effects on embedded systems. Radiation effects are a significant concern for space and avionic systems, as well as for critical applications operating at ground level (automotive, medical and banking). Lecturers with significant experience in key selected subjects will provide complete state-of-the-art instruction in this strategic field. The school is based on lectures, exercises, and practical courses involving real case studies using the common tools of the domain. The topics cover the full spectrum of radiation effects on space embedded systems: space environment, error mechanisms, testing, hardening by design, rate prediction. The intended audience includes both beginning and experienced researchers, engineers, and post-graduate students wishing to enhance their knowledge base in this rapidly evolving field. Topics covered by SERESSA include: radiation environment, spacecraft anomalies, single-event effects (SEE), total dose effects (TID), radiation effects in power systems, radiation effects in solar cells, architecture hardening in analog, and digital circuits and in memories, software hardening, effects in FPGAs, hardness assurance, rate prediction, radiation testing, laser testing and remote testing experiments.

Topics

- radiation environment
- spacecraft anomalies
- single-event effects (SEE)
- total dose effects (TID)
- radiation effects in power systems
- radiation effects in solar cells
- architecture hardening in analog and digital circuits and in memories
- software hardening
- effects in FPGAs
- hardness assurance
- rate prediction
- radiation testing
- laser testing
- remote testing experiments

About the venue:

Munich is the capital and most populated city in the German State of Bavaria. It is a leading location for science and research with a long list of institutions from academia and industry such as TU Munich, LMU Munich, MTU AeroEngines, Airbus Defence and Space and Ariane Space. This school will be held in cooperation with Leibniz Supercomputing Center at TUM's Campus Garching. The venue is easily reachable from the nearby Munich Airport and Munich Center Station by public transport, car or bike.

Please use any of the contacts below for additional information

Program Information

Jaime Estela
+ 49 163 414150
jaime.estela@spectrum-aerospace.com

Raoul Velazco
+33 4 76574689
Raoul.velazco@univ-grenoble-alpes.fr

Local Information

Martin Langer
+49 89 289 15995
martin.langer@tum.de

General Chairs

Pascal Fouillat, IMS, France
Raoul Velazco, TIMA, France

Program Chairs

Otmane Ait Mohamed, Concordia University, Canada

Local Chairs

Jaime Estela, Spectrum Aerospace, DE
Martin Langer, LRT, MW, TUM, DE
Dai Yang, LRR, IN, TUM, DE
Carsten Trinitis, LRR, IN, TUM, DE

Early Registration deadline:

September 10th, 2017

Registration deadline:

October 20th, 2017

Poster Submission deadline:

September 15th, 2017

Author Notification:

September 30th, 2017

Number of participants is limited.

Supporters:



Organized by:



Leibniz-Rechenzentrum
der Bayerischen Akademie der Wissenschaften