



SERESSA 2009



5th International School on the **Effects of Radiation** on Embedded Systems for Space Applications

JAEA Advanced Radiation Research Institute Takasaki, Japan December 2-4th, 2009

General Chairs

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

Program Chair

Vincent Pouget, CNRS, France

Local Chairs

Takeshi Ohshima, JAEA, Japan Satoshi Kuboyama, JAXA, Japan

Liaisons

Europe: Philippe Calvel, TAS, France North-America: Dale McMorrow, NRL, USA Latin-America: Ricardo Reis, UFRGS, Brazil

<u>Preliminary list of lecturers</u> P. Adell, *JPL*, *USA*

- H. Barnaby, ASU, USA G. Berger, UCL, Belgium
- S. Buchner, NASA GSFC, USA
- S. Duzellier, ONERA, France
- R. Ecoffet, CNES, France
- F. Lima-Kastensmidt, UFGRS, Brazil
- D. McMorrow, NRL, USA
- M. Pignol, CNES, France
- V. Pouget, IMS, France
- R. Velazco, TIMA, France

And others...

CALL FOR PARTICIPATION

This three day school combines the 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, 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.

Preliminary Program

- Environment
- Spacecraft anomalies
- Single-event effects
- Total dose effects
- Radiation effects in Power Systems
- Radiation effects in solar cells
- Architecture hardening
- Software hardening
- SEE in FPGAs
- Hardness assurance methodology
- Rate prediction
- Radiation testing
- Laser testing
- Remote experiments

Registration deadline: November 12th, 2009

For information and registration: http://www.ims-bordeaux.fr/SERESSA2009

Number of participants is limited

Please use any of the contacts below for additional information

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About the venue: Takasaki is 100km North-West of Tokyo, accessible from Tokyo station by commuter train, served by 3 airports, providing a convenient location for Japanese and International participants.











