



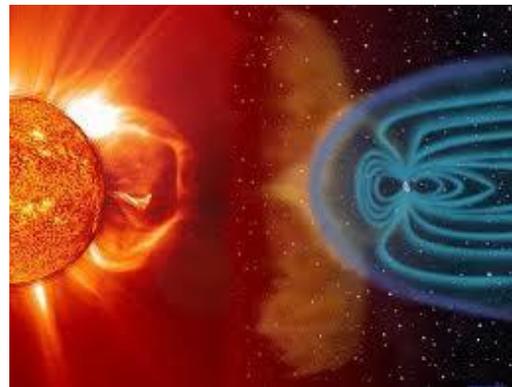
CALL for ABSTRACTS

WORKSHOP

“Radiation Effects on Solid State Optoelectronic Detectors”

27th-28th NOVEMBER 2018

ISAE-Supaéro
10 Avenue E. Belin, 31400 Toulouse



Co-organised by CNES, ESA, AIRBUS DEFENCE&SPACE, THALES ALENIA SPACE, SODERN, ISAE-SUPAERO, TELEDYNE E2V

Two years after a very fruitful fourth edition of this event, **CNES, ESA, AIRBUS DEFENCE&SPACE, THALES ALENIA SPACE, SODERN, TELEDYNE E2V** and **ISAE SUPAERO** are pleased to invite you to the 5th edition of the Workshop focused on radiation effects on optoelectronic detectors. This event will be held in Toulouse on November the 27th-28th 2018 within the framework of the **Optics & Optoelectronics (OOE)** and **Environment (ENV) Community of expert (COMET)**.

Optoelectronic detectors (image sensors, radiometric sensors, CIS, CCD...) are key elements in space and scientific instruments, and their performances have direct impact on the overall mission capability. It is well known that, in space application, radiation can strongly degrade major performance characteristics of optoelectronic detectors and even prevent their operation. Current and future space programs are more and more demanding in terms of lifetime and of End-Of-Life performance commitments, requesting deeper on-ground investigations. In addition, the evolution of CMOS and photodetector technologies induces new uncertainties regarding the behaviour of next generation detectors in Space.

The aim of this Workshop is to focus on radiation-induced effects either during ground tests or in-flight, on all types of detectors and technologies.

Although the workshop is mostly oriented to Visible/IR spectral range, this event is fully open to researchers/user working within other wavelength ranges. Developer working on non-space applications dealing with the same topics (Nuclear Physics, Medical Imaging...) are equally welcome to participate to this Workshop.

This Workshop is coupled with “Ultra-Violet Detectors and instruments” workshop which will be held the 28th-29th of November. The two workshops could share the poster session and the cocktail.

Papers are solicited in the following areas:

Basic Mechanisms of Radiation Effects on Optoelectronic Detectors

- Single Event Effects
- Displacement Damage Effects
- Total Ionising Dose Effects

Radiation Effects on Optoelectronic Detectors Performances

- Ground Irradiation Tests
- In-flight Results
- Impact of Performance Drift on Satellite Performances

Radiation Test Methodology and Facilities

- Test Guidelines, Qualification Plan
- Radiations Facilities
- Characterization Procedures

Radiation Tolerances of Optoelectronic Detectors

- Mitigation Techniques
- Radiation Hardened Design and Technology
- Specific Operation Modes

Tutorial

A tutorial will be proposed to the attendees during the workshop (45 min).

Workshop official language

Oral and poster presentations shall be requested for the workshop. The official language for the workshop is English.

Abstract submission

The authors are requested to prepare a one or two pages abstract in order to illustrate the relevance of their work. Oral and poster presentations are proposed. Oral presentations shall be limited to 15 minutes + 5 minutes for questions. The interactive poster session will be held at the end of the day, during the cocktail. Electronic proceeding will contain slides of the oral presentations and posters.

Registration

Registration is mandatory

On line registration: (will be open in September) 25€ per day to cover organisation, breaks and lunches.

Schedule

September 14th: Dead line for abstract submission
 September 28th: Paper selection
 October 20th: Final programme
 November 11th: Deadline for registration
 November 27th: Workshop

Organization committee

Cédric VIRMONTOIS Olivier GILARD Denis STANDAROVSKI	CNES
Olivier SAINT-PE	Airbus Defence and Space
Stéphane DEMIGUEL	Thalès Alenia Space
Vincent GOIFFON	ISAE-SUPAERO
Dominique HERVE	SODERN
Alessandra CIAPPONI	ESA
Frédéric DEVRIERE	TELEDYNE E2V

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Workshop location : ISAE Toulouse