

Abstract deadline
13 September 2021



OPTRO 2022

10th International Symposium
on Optronics in Defence & Security

Versailles • France • 01-03 February 2022

Call For Papers

www.3af-optro.com

OBJECTIVES

3AF – The French Aerospace Society – organizes OPTRON2022, the 10th International Symposium on Optronics in Defence and Security, from 1st to 3rd February, 2022.

OPTRON is the European event for engineers and scientists in the field of Optronics.

For its 10th edition, **OPTRON2022 will reserve special topics to highlight the growing place of Optronics in Defense and Space.** By gathering leading specialists from government, industry, university and laboratories, the Symposium will offer opportunities to implement fruitful exchanges between colleagues of different countries and disciplines.

EPIC Roundtable 2022 will be dedicated to smart optronic detectors.

OPTRON2022 will present recent advances in **Optronics in the fields of Defence and Security** and perspectives that Photonics offers in the near future through emerging technologies.

OPTRON2022 will host an exhibition, within the conference centre, offering to all attendees and exhibiting companies in Optronics areas an opportunity to exchange on technical know-how and products.

PhD's communications will be included in symposium sessions and will be highlighted by the OPTRON 2022 best PhD communication Award.

OPTRON 2022 Award will be attributed on **February 2nd, 2022.**

Keynote Addresses

- Alain ASPECT, CNRS
- Jean-François RIPOCHE, EDA
- Dan LEMASTER, AFRL
- Daniel DOLFI, THALES
- Michael GROENERT, CSISR
- ...

Round Table

[Optronics for Space]

PROGRAMME COMMITTEE

ADAM	Philippe	SFO	FR	LEE	Carlos	EPIC	BE
BARRAT	Benoît	MBDA FRANCE	FR	LEFEVRE	Franck	ONERA	FR
BERGINC	Gérard	TOSA	FR	LEMASTER	Daniel	AFRL	US
BERIZZI	Fabrizio	EDA	IT	LETALICK	Dietmar	FOI	SE
BESSON	Claudine	ONERA	FR	LONNOY	Jacques	3AF	FR
BRETES	José	Laser Components	FR	LUTZ	Holger	AIM	DE
COTEL	Arnaud	Airbus Defense & Space	FR	MATHIEU	Clément	Dassault Aviation	FR
COURSAGET	François	NIT	FR	MOULLEC	Jean-Baptiste	DGA	FR
COUTRIS	Jean-François	CSINT	FR	MÜNZBERG	Mario	Hensoldt	DE
CUGNY	Bruno	CNES	FR	PAOLACCI	Sylvie	DGA	FR
DE LA BARRIERE	Florence	ONERA	FR	PISTONE	Frédéric	Thales Alenia Space	FR
DUPOUX	Thierry	Safran Electronics & Defence	FR	POZO	José	EPIC	FR
ELDER	Ian	Leonardo	UK	RABAULT	Denis	TOSA	FR
FOURNIER	Gilles	ArianeGroup	FR	ROUX	Jean-Noël	Thales	FR
GEYL	Roland	Safran REOSC	FR	ROY	Vincent	DRDC-RDDC-VALCATIER	CA
GOUDAIL	François	IOGS	FR	RUBALDO	Laurent	LYNRED	FR
GRAVRAND	Olivier	CEA-LETI	FR	SCHMITT	Nikolaus	Consulting	DE
GROENERT	Michael	CSISR	US	SHIMONI	Michael	RMA	BE
HAAKESTAD	Magnus	FFI	NO	SILVER	Mark	Thales	UK
HILL	Lee	DSTL	UK	SODNIK	Zoran	ESA/ESTEC	NL
KLING	Emmanuel	SAFRAN	FR	STEIN	Karin	Fraunhofer-IOSB	DE
KOECHLIN	Charlie	Sodern	FR	URIBE	Juanie	CSISR	US
KOPCZYNSKI	Krzysztof	Mil. University of Tech.	POL	USAI	Andrea	Ellectronica	IT
KRAUSE	Ulf	Jenoptik	DE	VORONTSOV	Mikhail	Dayton University	US
LALLIER	Eric	TRT	FR	WALTHER	Martin	Fraunhofer-IAF	DE

CALL FOR PAPERS

Original papers are solicited on the following critical areas of research and engineering. Selection for an oral presentation by the Programme Committee will be based on the abstract. All abstract submissions will be assessed by members of the Symposium Programme Committee. The selected contributors will be requested to submit the full paper to the Conference Secretariat.

All accepted and presented communications will be published in the proceedings and distributed at the conference. **PhD's papers are particularly appreciated.**

CONFERENCE TOPICS AND KEYWORDS

_1 Imaging & Systems IR Imaging, SWIR imagers, goggles, binoculars, IZ, low light level imaging, airborne piloting and targeting, spectroscopic imagers, intelligent munitions, thermal weapon sights, multi modal (RF/Optro) sensors, multispectral, image fusion, soldier systems, displays, inertial sensors...

_2 Sensors & components: visible detectors, EMCCD, IR uncooled and cooled, superlattice detectors, multi band detectors, 3D FPA, photon counting, optical design, optical engineering, optomechanics, optical materials, windows, domes, finishing methods, optical testing, optical filters, protective coatings, laser damage resistance, cooling systems, adaptive optics, deformable mirrors...

_3 Laser Sensor & Systems: medium and high energy laser, laser weapons, active (2D/3D) imaging, fiber laser, QCL, laser range finder, laser designator, laser polarimetry and vibrometry, laser spectroscopy, lidar, laser radar, air vehicles self protection, laser tracking systems, turbulence corrections...

_4 Signal & Image Processing: multispectral / hyperspectral algorithms, anomaly detection, atmospheric correction, feature extraction, target recognition, performance measurement, tracking, matching and filtering, sensor / data fusion, centralized distributed architecture, adaptive / knowledge based fusion...

_5 Simulation: physical model, analytical model, performance analysis, evaluation means, model validation, simulation, scenario, scene and target generation...

_6 Photonics R&T and Emerging Technologies: micro-nanotechnologies, nanophotonic material, plasmonics, carbon nanotubes, metamaterials, photonic crystals, terahertz, on chip processing, compressive sensing...

_7 Airborne Applications: Airborne lasers and optical measurement (active/passive), sensors (incl. fiber optical sensors), optical navigation, sense & avoid, self-protection, optical communication, for mission or flight critical systems in civil and/or military aircraft, drone payload...

_8 Air, Land & Sea Defence Applications: Reconnaissance, ISR, navigation systems, IRST, naval E.O directors, optronic mast, periscope, avoidance systems, gyrostabilized airborne sights, armored vehicles fire control systems, anti aircraft and antitank systems...

_9 Homeland Security Applications: border surveillance, detection-recognition- tracking and protection against small UAV's and unmanned vehicles, forensics, illicit substance detection, CBRN detection (chemical, biological, radiological, nuclear) (point, standoff), mines detection, explosive compound detection, IED detection, multi sensors sensing, sensors fusion, system integration, detection of underground tunnels / bunkers, UWB radars...

_10 Space Applications: space optical systems, space telescope, space imagers, space cryogenics, Earth observation, mission description, remote sensing, space spectrometers, space lidars and lasers, metrology...

ABSTRACT SUBMISSION

The abstract should give sufficient insight on the paper to be presented at the Symposium and enable the selection for oral presentation.

- The selected papers will be presented in a 20 minutes speech at the Symposium (included 5 minutes for Q&A).
- An abstract will be selected based on the importance and originality of the subject addressed, on its relevance to the conference theme, on the clarity of its expression.
- The abstract should be a "stand alone" summary that can be used in the compilation of abstracts.
- The abstract should be in English and no longer than 500 words.

- The abstract should summarize the main objectives of the paper to be presented and outline its conclusions.
- Work that has been presented elsewhere, and not updated, will be considered inappropriate.
- Notification by the Programme Committees will be accompanied by detailed instructions allowing authors to prepare and make the online submission of their full paper.
- Failure to comply with the deadlines and instructions required will entail not having the paper selected and included in the conference proceedings.
- All abstracts should be submitted www.3af-optro.com from 4 june to 13 september 2021.

OPTRO2022 AT A GLANCE

TUESDAY 01 FEBRUARY 2022		WEDNESDAY 02 FEBRUARY 2022				THURSDAY 03 FEBRUARY 2022				
M O R N I N G	REGISTRATION	ROOM 1	ROOM 2	ROOM 3		ROOM 1	ROOM 2	ROOM 3		
	INTRODUCTION TO THE SYMPOSIUM	3 PARALLEL SESSIONS				3 PARALLEL SESSIONS				E X H I B I T I O N
	HONORARY PRESIDENT ADDRESS									
	INTRODUCTION TO OPTRO 2022									
	KEYNOTE ADDRESSES									
A F T E R N O O N & E V E N I N G	KEYNOTE ADDRESSES	3 PARALLEL SESSIONS				3 PARALLEL SESSIONS				
	SYMPOSIUM ROUND TABLE									
						END OF SYMPOSIUM				
	GALA DINNER	COCKTAIL SOCIAL EVENT OPTRO 2022 Award OPTRO 2022 PhD Best Paper Award								

Conference milestones :

Abstracts and papers shall be submitted on OPTRO website: www.3af-optro.com
 Abstract submission site open on **4 June 2021**
 Paper submission site open on **18 October 2021**
 Final programme: **20 December 2021**

Language

Symposium official language is English.
 All documents must be in English

Organizing Committee

Symposium Chair: Claudine BESSON
 ONERA - The French Aerospace Lab - DOTA Deputy Director
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Co-Chairs : **Philippe ADAM** - SFO,
Jean-François COUTRIS - CCINT,
Jacques LONNOY - 3AF,
Jean-Baptiste MOULLEC - DGA,
Florence de la BARRIERE - ONERA,

Submission deadlines

Abstract Deadline : **13 September 2021**
Author Notification : **18 October 2021**
Full paper Deadline : **6 December 2021**

NEW - Venue

Palais des Congrès
 10, Rue de la Chancellerie 78000 VERSAILLES, France
<https://www.versaillespalaisdescongres.com/>
 Close to the renowned Chateau de Versailles, this new venue is easily reachable from Paris by RER and bus.

Conference Secretariat

OPTRO2022 Secretariat : **Aude LURBE**
 6, rue Galilée - 75016 Paris France
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Partners

