

OPTRO2024 PRELIMINARY PROGRAMME

UPDATED ON
23/01/2024

DAY 1 - TUESDAY 23 JANUARY 2024

09:00	TECHNICAL VISIT (on registration only)
10:00	WELCOME COFFEE & EXHIBITION
12:30	LUNCH BREAK & EXHIBITION
	PLENARY SESSION
	WELCOME ADDRESSES
14:00	Jean-François COUTRIS , General Secretary - 3AF, FR Claudine BESSON , OPTRO 2024 General Chair - ONERA, The French Aerospace Lab, FR
	OPTRO 2024 HONORARY PRESIDENT KEYNOTE ADDRESS
14:30	Alain ROUSSET , President of region Nouvelle Aquitaine, FR
	INTRODUCTION TO OPTRO 2024
14:50	Professor Donna STRICKLAND , University of Waterloo, CA
	KEYNOTES ADDRESSES Chair: Florence DE LA BARRIERE , ONERA - The French Aerospace Lab, FR
15:20	Flavio CHIOMENTO , French Directorate General of Armaments, FR
15:40	Dr. Michael GROENERT , US Army DEVCOM C5ISR Research Technology Integration Directorate, USA
16:00	Anna EIDEN , ESA, FR
16:20	Q&A session
16:30	COFFEE BREAK & EXHIBITION
	KEYNOTES ADDRESSES Chair: Jean-Baptiste MOULLEC , French Directorate General of Armaments, FR
17:00	Rüdiger QUAY , Fraunhofer IAF, GE
17:20	Riad HAIDAR , ONERA, The French Aerospace Lab, FR
17:40	Chriss TISSE , Exosens, FR
18:00	END OF FIRST DAY PROGRAMME
20:00	OPTRO2024 GALA DINNER

DAY 2 - WEDNESDAY 24 JANUARY 2024

08:00				WELCOME COFFEE & EXHIBITION		
ROOM 1		ROOM 2		ROOM 3		
SESSION 1		SESSION 2		SESSION 3		
IMAGING AND SYSTEMS - 1		LASER SENSOR AND SYSTEMS - 1		SIGNAL AND IMAGE PROCESSING - 1		
Chair	Chairperson : Dietmar LETALICK, FOI		Chairperson : Gilles FOURNIER, Arianegroup		Chairperson : Karin STEIN, Fraunhofer-IOSB	
09:00	36 NIORD: a compact high-resolution low-light imager for marine traffic surveillance Alexandre BOUEE*, Xavier BOZEC, Jean-Louis CAREL, Christophe CLOUTRIER, Josselin COUPARD, François RIGUET, Océane ROURE, Olivier THEBAULT, Valentin VIEILLLOT Engineering, SAFRAN REOSC, Saint Pierre du Perray, France	82 Ramsey CPT signal observation with optically injected free-space laser sources Jérémie COTXET, Tristan BARTHELEMY, François GUTTY*, Ghaya BAILI, Loïc MORVAN, Daniel DOLFI, David HOLLEVILLE, Stéphane GUERANDEL 1Physics Research Group, THALES Research and Technology, Palaiseau Cedex, France 2Observatoire de Paris, Université PSL, CNRS, Sorbonne Université, LNE-SYRTE, Paris, France	39 A contrario paradigm for infrared small target detection Alina CIOCARLAN*, Sylvie LE HEGARAT-MASCLE, Sidonie LEFEBVRE, Arnaud WOISELLE, Clara BARBANSON 1SATIE, Université Paris-Saclay, Orsay, France 2Safran Electronics & Defense, Massy, France 3DOTA & LMA2S, ONERA - The French Aerospace Lab, Palaiseau, France			
09:20	30 Simultaneous Multiple Surfaces method applied for two off-axis mirror optical systems in infrared Jade DESPLANS, Thibaut MAYER, Guillaume DRUART* ERIO/DOTA, ONERA, Palaiseau, France	35 All-pedestal 2-µm fiber laser design to improve both beam quality and optical efficiency Christophe LOUOT*, Arnaud MOTARD, Nicolas DALLOZ, Thierry ROBIN, Laurent LABLONDE, Benoit CADIER, Félix SANSON, Thierry IBACH, Inka MANEK-HONNINGER, Anne HILDENBRAND-DHOLLANDE 1FRENCH-GERMAN RESEARCH INSTITUTE OF SAINT-LOUIS, Saint-Louis, France 2EXAIL, Lannion, France 3UNIVERSITE BORDEAUX, CNRS CEA, CELIA UMR5107, Talence, France	50 Evaluation of close-range calibration of infrared cameras for use in high altitude UAV flights Benedicte BASCLE*, Jean-Clément DEVAUX image processing team, Thales LAS, Montigny-le-Bretonneux, France			
09:40	75 Optical metrology for Euclid telescope and space applications Rafael PORCAR*, Fabrice SANSON, Rémy JUVENAL, Guillaume DOVILLAIRE R&D, Imagine Optic, Orsay, France	33 Compact QCL-based coherent LiDAR in the mid-infrared Bruno MARTIN, Patrick FENEYROU, Nicolas BERTHOU, Djamel GACEMI, Aude MARTIN*, Carlo SIRTORI 1Thales Research and technology, Thales, Palaiseau, France 2Thales SIX France, Genevilliers, France 3Laboratoire de physique, Ecole normale supérieure, Paris, France	41 HaRFormer: Advancing Dehazing and Artefact Reduction through Transformer-based Image Restoration Antonio DI TOMMASO*, Niccolò CAMARLINGHI, Giacomo FONTANELLI, Benedetto MICHELOZZI, Andrea MASINI Research and Development, FlySight S.r.l., Livorno, Italie			
10:00	13 SWIR's advantage over the visible in long-range imaging scenarios: comparative field trials in a variety of atmospheric conditions Gabriel JOBERT*, Nicolas VANNIER, Sandra PELLETIER, Romain DELUBAC, Xavier BRENIERE Dir. of Strategy, Communication & Technology, Lynred, Veurey-Voroize, France	14 Design and fabrication of optical waveguides for high-power density laser diodes for LiDAR applications Thierno Mamoudou DIALLO*, Christophe RODRIGUEZ, Jean DENIS, Eric DESFONDS, Jean-Francois BOUCHER, Said ROUIFIED Laser Components, Vaudreuil-Dorion, Canada	43 Comparison of transformation-based Compressive Single Pixel Imaging methods for real-time applications Juergen LIMBACH*, Christian EISELE Signatorics, Fraunhofer Institute of Optronics, System Technologies and Image Exploitation IOSB, Ettlingen, Allemagne			
10:20	COFFEE BREAK & EXHIBITION					

DAY 2 - WEDNESDAY 24 JANUARY 2024

	ROOM 1	ROOM 2	ROOM 3
	SESSION 4	SESSION 5	SESSION 6
	IMAGING AND SYSTEMS - 2	LASER SENSOR AND SYSTEMS - 2	SIGNAL AND IMAGE PROCESSING - 2
Chair	Chairperson : Magnus HAAKESTAD, FFI	Chairperson : Mark SILVER, THALES	Chairperson : Eric BELHAIRE, THALES LAS
10:50	<p>60 Optimisation of several freeform reflective imaging optical systems using FORMIDABLE: an optical design library with NURBS capabilities and differential ray tracing</p> <p>Clément FRESLIER*, Guillaume DRUART, Thierry LEPINE, Christophe BUISSET, Tibor AGOCS, Arnaud HELIERE, Jean-Baptiste VOLATIER, Stéphane BEAUSSIER 1DOTA/ERIO, ONERA, Palaiseau, France 2Laboratoire Hubert Curien UMR 5516, CNRS, Saint Etienne, France 3European Space Agency, Noordwijk, Pays-Bas 4Constellr, Freiburg, Allemagne 5Valley Optics, Delft, Pays-Bas</p>	<p>1 Multi-Functional Sensor with High Frame Rate Laser Spot Tracker</p> <p>Rahel FARUHI*, Claudio JAKOBSON, Nimrod BEN ARI, Roman DOBROMISLIN, Niv SHILOAH, Matan GOLDFARB, Oren COHEN, Oren OFER, Edan SHUNEM, Michael LABILOV, Menashe ALCHECK, Ehud ALMOG, Michal NITZANI, Yoram KARNI, Rami FRENKEL, Tuvy MARKOVITZ, Or DICKER, Benny MILGROM 1R&D, SCD, Akko, Israël 2IMOD, Tel Aviv, Israël</p>	<p>5 Neural network-based noise estimation from natural scene</p> <p>Pascal NGUYEN*, Jean-Paul FOING* 1ASC2-IA2P, DGA-MI, Bruz, France 2CGN2/SDO, DGA-MI, Bruz, France</p>
11:10	<p>78 Design of an αZ Wide-field and High Angular Resolution Imaging System in the Visible Spectrum</p> <p>Alexandre BOUEE*, Agnès VINOY, Marie-Anne BURCKLEN, Yvan SORTAIS, Marc FERRARI, Thierry LÉPINE, François RIGUET, Jacques RODOLFO 1Laboratoire Charles Fabry, Institut d'Optique Graduate School, Palaiseau, France 2Laboratoire d'Astrophysique de Marseille, Marseille, France 3Laboratoire Hubert Curien, Saint-Etienne, France 4Safran REOSC, Saint-Pierre-du-Perray, France</p>	<p>42 Advanced night and day active imaging solution for small autonomous tactical platforms</p> <p>Colin FISCHER, Yves LUTZ* AVP, ISL, Saint-Louis, France</p>	<p>21 SeiNet : Optimized band selection neural network in hyperspectral aerial imagery</p> <p>Corentin ABGRALL*, Clément DEANTONI IMAGE PROCESSING, Thales LAS France OME, Elancourt, France</p>
11:30	<p>80 Birefringent interferometer for snapshot hyperspectral imaging: Design, simulation and experimental results.</p> <p>Mathieu PORTE*, Elisa BALDIT, Frédéric BERNARD, Yann FERREC, Nicolas GUERINEAU 1DOTA/ERIO, ONERA, Palaiseau, France 2CNES, Toulouse, France</p>	<p>76 Coherent combining of fiber lasers in a tiled-aperture geometry by use of deep-learning approaches</p> <p>Laurent LOMBARD, Christophe PLANCHAT, Didier GOULAR, François GUSTAVE, Nathanaël HULARD, Pierre BOURDON* DOTA (Optics Department), ONERA, Palaiseau, France</p>	<p>16 Test-Time Adaptation with Principal Component Analysis</p> <p>Thomas CORDIER, Clément ROLINAT*, Gilles HENAFF, Céline HUDELLOT 1Service de Traitement d'Images, Thales Land and Air Systems, Elancourt, France 2Mathématiques et Informatique pour la Complexité et les Systèmes, Université Paris-Saclay, CentraleSupélec, Gif-Sur-Yvette, France</p>
11:50	<p>58 Uncooled and Shutterless Microbolometer-Based Infrared Radiometric Camera for Small Spaceborne and Airborne Systems</p> <p>Olivier GAZZANO*, Mathieu CHAMBON, Christophe COUDRAIN, Laurent ROUSSET ROUVIERE DOTA, ONERA - The French Aerospace Lab, Palaiseau, France</p>	<p>9 Deep ICP-RIE etch trenches with sidewall slope control of GaAs-based high power 905nm pulsed laser diodes</p> <p>Saïd ROUFED, Jean-François BOUCHER, Éric DESFONDS, Thierno Mamoudou DIALLO, Jean DENIS, Christophe RODRIGUEZ* R&D, LASER COMPONENTS Canada, Inc., Vaudreuil-Dorion, Canada</p>	
12:10	LUNCH BREAK & EXHIBITION		

DAY 2 - WEDNESDAY 24 JANUARY 2024

	ROOM 1	ROOM 2	ROOM 3
	SESSION 7	SESSION 8	SESSION 9
	SPACE AND AIRBORNE APPLICATIONS - 1	LASER SENSOR AND SYSTEMS - 3	SENSORS AND COMPONENTS - 1
Chair	Chairperson : Mario MUENZBERG, Hensoldt	Chairperson : Martin WALTHER, Fraunhofer -IAF	Chairperson : Nicolas PÉRÉ-LAPERNE, LYNRED
14:00	67 SAURON : The european project for the development of Sensors for identification and characterization of space objects Thibault DE LA VILLEGORGES, Carole HUDE, Bruno ESMILLER* Security in Space, ArianeGroup, Les Mureaux, France	52 Systematic propagation and scattering studies of light that carries orbital angular momentum Svetlana AVRAMOV-ZAMUROVIC*, Nathaniel FERLIC, Owen O'MALLEY, Matthew HART, Shawn DIVITT, Vasanthi SIVAPRAKASAM, Peter JUDD, Martin LAVERY, Linda MULLEN, Matthew KALENSKY, Jonathon WELLS, Samuel MELLON 1Weapons, Robotics and Control Engineering Department, United States Naval Academy, Annapolis, Etats-Unis 2Naval Research Laboratory, Washington, Dc, Etats-Unis 3Naval Air Warfare Center Aircraft Division, Patuxent River, Etats-Unis 4University of Glasgow, Glasgow, Royaume-Uni 5Naval Surface Warfare Center, Dahlgren, Etats-Unis 6Naval Information Center Atlantic, North Charleston, Etats-Unis	66 Use of Electron Beam Induced Current technique to characterize low-gap-energy materials for IR detection Samantha BUSTILLOS VASCO DOPT/SCIM/LIR, CEA-Leti, Grenoble, France
14:20	81 2m class telescope for Space Domain Awareness: the Onera's research project 'PROVIDENCE' Cyril PETIT*, Nicolas VEDRENNE, Claudine BESSON, Antoine ROBLIN, Thierry FUSCO DOTA, Onera, Châtillon, France	56 HIGH POWER COHERENT BEAM COMBINATION DIGITAL LASER Claude-Alban RANÉLY-VERGÉ-DÉPRÉ, Ihsan FSAIFES, Corentin LECHEVALIER, Jean-Christophe CHANTELOUP* 1LULI, Ecole polytechnique, Palaiseau, France 2Thales LAS France SAS, Elancourt, France	57 Update on in High-Availability Cryocoolers at Thales Cryogenics Roel ARTS*, Daniel WILLEMS, Garnt DE JONGE R&D, Thales Cryogenics, Eindhoven, Pays-Bas
14:40	69 Towards an all-orbit optical data service provisioning based on ArianeGroup HELIX system Marine PYANET, Bruno ESMILLER* Security in Space, ArianeGroup, Les Mureaux, France	79 ONERA/DOTA activities in ADDITION and JEY CUAS projects. Contribution of 3D LIDAR technology to Counter UAS application as a complement to RF and EO detection solutions: current status, challenges, improved concepts and prospects. Laurent HESPEL*, Thibault DARTIGALONGUE, Fabien REVERSAT, Jean-Jacques HENNIN 1DOTA, ONERA, Toulouse, France 2SYRLINKS, Cesson-Sévigné, France 3EXAVISION, Milhaud, France	34 Speed and responsivity optimization for near-infrared silicon photodetectors with black surface Toni PASANEN*, Juha HEINONEN, Michael SERUÉ, Antti HAARAHILTUNEN EIFys, Inc., Espoo, Finlande
15:00	17 Airborne Hyperspectral Imaging for the Detection, Identification, and Quantification of Greenhouse Gases Emitted from a Flare Stack - Telops Airborne Mini Platform Stéphane BOUBANGA TOMBET*, Antoine DUMONT Telops, Quebec City, Canada	19 Upconversion active imaging system at 2 µm with a double pulsed fiber laser Romain DEMUR*, Arnaud GRISARD, Eric LALLIER, Luc LEVIANDIER Groupe de Physique, Thales Research & Technology, Palaiseau, France	32 Designing, testing and validating a COTS pigtailed InGaAs APD receiver for rugged defense applications Patrick LEPAGE*, Jean-Francois RIOUX, Paul VERVILLE, Mourad TALSMAT, Stefan PREDOIU, Nicolas BELANGER, Pierre Adrien KERNEIS, Sec Bernicy FONG Microelectronics Group, CMC Electronics, Montreal, Canada
15:20	COFFEE BREAK & EXHIBITION		
	ROOM 1	ROOM 2	
	SYMPOSIUM ROUNDTABLE Chair: Jean-François COUTRIS, President of the 3AF Optronics Technical Committee	EPIC ROUNDTABLE Chair : Jeremy Picot-Clemente, Photonics Technologies Manager - EPIC	
16:00	Role of Optronics in recent military conflicts Colonel Arnaud DENE French, Air and Space Staff - Commander Marc DEVOUX, French Navy Staff IPA Nicolas VONS, Technical Directorate/DGA - Mr Romain LADRET PICIORUS, European Commissio/DG DEFIS	Advanced imaging and sensing technologies for detection, reconnaissance and identification.	
18:00	COCKTAIL & OPTRO AWARDS - EXHIBITION AREA		
20:00	END OF SECOND DAY PROGRAMME		

DAY 3 - THURSDAY 25 JANUARY 2024

08:00				WELCOME COFFEE & EXHIBITION		
		ROOM 1	ROOM 2	ROOM 3		
		SESSION 10	SESSION 11	SESSION 12		
		SPACE AND AIRBORNE APPLICATIONS - 2	LASER SENSOR AND SYSTEMS - 4	SENSORS AND COMPONENTS - 2		
Chair	Chairperson : Laurent HURE, Safran		Chairperson : Eric LALLIER, THALES		Chairperson : Laurent RUBALDO, LYNRED	
09:00	68 Development and deployment of SWIR optical station for daytime space object observations Gabriel DAGUERRE, Bruno ESMILLER* Security in Space, Arianegroup, Les Mureaux, France	24 LASER DIODES AND PHOTODIODES FOR FUSED MUNITIONS' SENSOR Denis BOIREAU*, Branko PETROV Defense Sensors, Excelitas Technologies, Vaudreuil-Dorion, Canada	11 8.5µm pitch bolometer FPA : latest developments at Lynred Sebastien CORTIAL DSCT, LYNRED, Sassenage, France			
09:20	38 Modeling the optical signature of a satellite Ugo TRICOLI*, François MARGALL, Florian HOFBAUER, Eric COIRO Optical department, ONERA, Salon-de-Provence, France	83 High-Power Fiber Components and Fiber Arrays for Laser Beam Combining at 1µm and 2µm Christoph OTTENHUES, Tony PULZER, Thomas THEEG Development, FiberBridge Photonics, Hannover, Allemagne	55 Advancements in Mid-IR Detector Technologies for Defense Applications Jacek KULAKOWSKI Sales, VIGO System S.A., Ozarow Mazowiecki, Pologne			
09:40	74 Low SWaP SuperCam laser for a compact LIBS instrument Stéphane DAVID, Christophe DERYCKE, Eric DURAND, Baya BENNAI Thales LAS France, Elancourt, France	71 Overview of high energy pulsed lasers and their applications Olivier CHALUS, Olivier CASAGRANDE, Hervé BESAUCELE, Christophe SIMON-BOISSON* Thales LAS France, Elancourt, France	46 Correlation between Tobin factor and RTS defect in MWIR spectral range Antoine CLARET*, Cyril CERVERA, Nicolas BAIER, Olivier GRAVRAND, Alexandre KERLAIN, Laurent RUBALDO 1DOPT/SCIM/LIR, CEA Grenoble, Grenoble, France 2Lynred, Veurey-Voroize, France			
10:00	53 Investigation of Radiation Effects on Low Noise Photoreceivers for Laser Interferometric Space Applications such as LISA Paul COLCOMBET*, Nicoleta DINU JAEGER, Christophe INGUIMBERT, Thierry NUNS, Petter HOFVERBERG, Gerhard HEINZEL, German FERNÁNDEZ BARRANCO, Niels VAN BAKEL, Jean IN T ZAND, Izumi KIWAMU 1DPHY, ONERA The French Aerospace Lab, Toulouse, France 2ARTEMIS, Université Côte d'Azur, Observatoire de la Côte d'Azur, CNRS, Nice, France 3Albert Einstein Institute, Postdam, Allemagne 4National Institute for Subatomic Physics, Amsterdam, Pays-Bas 5Institut Méditerranéen De Protonthérapie – Centre Antoine Lacassagne, Nice, France 6Netherlands institute for Space Research, Leiden, Pays-Bas 7Japan Aerospace Exploration Agency, Tokyo, Japon	73 Lidar activities at DRDC Valcartier Research Centre Grégoire TREMBLAY Electro-Optical Signature Exploitation (EOSE), Defence Research and Development Canada, Valcartier Research Centre, Québec, Canada	6 Crane HOT MWIR for MAWS and DAS application Lior SHKEDY*, Itay HIRSH, Philip KLIPSTEIN, Sivan GLIKSMAN, Michal NITZANI, Nimrod BEN ARI, Niv SHILOAH, Claudio JAKOBSON, Yair LURY, Hadar NAHOR, Olga KLIN, Nechemya YARON, Osnat MAGEN, Yael BENNY, Amir CAHANA, Nati ASHUSH, Or DICKER, Benny MILGROM, Tuvy MARKOVITZ 1R&D, Semi Conductor Devices, Karmiel, Israël 2Israel MOD, Tel Aviv, Israël			
10:20				COFFEE BREAK & EXHIBITION		

DAY 3 - THURSDAY 25 JANUARY 2024

	ROOM 1	ROOM 2	ROOM 3
	SESSION 13	SESSION 14	SESSION 15
	AIR, LAND, SEA AND HOMELAND DEFENSE APPLICATIONS	PHOTONICS R&T (NEW) AND EMERGING TECHNOLOGIES	SENSORS AND COMPONENTS - 3
Chair	Chairperson : Fabrizio BERIZZI, EDA	Chairperson : Michael GROENERT, C5ISR	Chairperson : Holger LUTZ, AIM
10:50	<p>51 High performance multispectral sensor suites for all optronics mast systems on submarines</p> <p>Martin HUEBNER*, Christian LEHMANN Development, HENSOLDT Optronics GmbH, Oberkochen, Allemagne</p>	<p>65 Miniaturized optical system for a chip based cold atom inertial sensor</p> <p>Soizic HELLO*, Benjamin WIRTSCHAFTER, Matthieu DUPONT-NIVET, Christoph WESTBROOK, Ludovic FULOP, Aurelien BOUTIN 1Thales AVS, Châtellerault, France 2Thales Research&Technology, Palaiseau, France 3Institut d'Optique Graduate School, Palaiseau, France 4Exail, Pessac, France</p>	<p>72 HgCdTe SWIR / MWIR DETECTORS: PASSIVATION AND ELECTRICAL PROPERTIES OF THE BACKSIDE ILLUMINATED ETCHED SURFACE</p> <p>Hugo ROUSSET*, Florent ROCHETTE, Sarah PETIT, Julie ABERGEL, Diane SAM GIAO, Nicolas BAIER, Laurent RUBALDO, Olivier GRAVRAND 1LETI/SCIM/LIR, CEA, Grenoble, France 2LYNRED, Veurey-Voroize, France</p>
11:10	<p>37 Inertial LOS Stabilization Using a 3-DOF Spherical Parallel Manipulator with Coaxial Input Shafts</p> <p>Alexandre LE*, Guillaume RANCE, Fabrice ROUILLIER, Damien CHABLAT 1DPP OPTRO / CE MOD ET CAM / TAG, Safran Electronics & Defense, Massy Cedex, France 2OURAGAN, Inria Paris, Paris, France 3Mathématiques, Sorbonne Université, Université de Paris Cité, Institut de Mathématiques de Jussieu Paris Rive Gauche, Paris, France 4Nantes Université, École Centrale Nantes, CNRS, LS2N, UMR 6004, F-44000, Nantes, France</p>	<p>47 Elaboration and characterization of Nd3+:YAG polycrystalline ceramics for high-performance laser applications</p> <p>Camille PERRIÈRE*, Lucile LALLEMANT, Alain JALOCHA, Luc NGUYEN 1Research & Development, SOLCERA, Evreux, France 2CILAS, Orléans, France</p>	<p>48 HOT SWaP HD Type-II superlattice detectors at IRnova</p> <p>M. DELMAS(1), L. HÖGLUND(1), R. IVANOV(1), P. MARTIN-GONTHIER(2), D. RAMOS(1), S. HÖGNADOTTIR(1), L. ŽURAUŠKAITĖ(1), D. EVANS(1), D. RIHTNESBERG(1), E. COSTARD*(1) (1) IRnova AB. Electrum 236 – C5, SE-140 40 Kista, Sweden (2) ISAE-SUPAERO, Université de Toulouse, F-31055 Toulouse, France</p>
11:30	<p>28 Filled Aperture Coherent Beam Combining using Multi-Plane Light Conversion and Microcontroller-Based Hill Climbing.</p> <p>Clément JACQUART, Claire AUTEBERT, Raphaël PICCON, Tangi LE GUENNIC*, Julien BAYOL, Pu JIAN, Guillaume LABROILLE Custom, Cailabs, Rennes, France</p>	<p>49 Large sized dielectric nanostructured electro-optic sensors</p> <p>Meharunissa AMIDULLAH*, Miguel SUAREZ, Ayman HOBLOS, Maria-Pilar BERNAL, Nadege COURJAL, Aurelien BOUTIN, Alexandre BOUVIER, Loic MORVAN, Julien SCHIELLEIN, Vincent KEMLIN 1LAS, Thales Land and Air, Limours, France 2Onde et traitement de signal, OTS Thales research technology, Thales TRT, Palaiseau, France 3Lab, FEMTO-ST, Besançon, France 4Lab, EXAIL, Paris, France</p>	<p>25 III-V technology developments with a High Operating Temperature at LYNRED</p> <p>Nicolas PÉRÉ-LAPERNE*, Alexandre BRUNNER, Gulnar DAGHER, Jérôme COUSSEMENT, Axel EVIRGEN, Jean-Luc REVERCHON, Bouzid SIMOZRAG, Michel GARCIA, Bruno GÉRARD, Cyril CERVERA, Olivier GRAVRAND 1DSCT, LYNRED, Veurey-Voroize, France 2III-V Lab, Palaiseau, France 3CEA-LETI, Grenoble, France</p>
11:50	<p>63 Real-time wide-area motion imagery on the edge using a single optronic sensor</p> <p>Niccolo CAMARLINGHI*, François VILLEMIN, Antonio DI TOMMASO, Giacomo FONTANELLI, Benedetto MICHELOZZI, Andrea MASINI 1research and development, FlySight, Livorno, Italie 2ENSTA Bretagne, Brest, France</p>	<p>44 SWIR Luminescent concentrators</p> <p>Lisa LOPEZ*, Hussein TALEB, Frédéric DRUON, Patrick GEORGES, François BALEMBOIS Université Paris-Saclay, Institut d'Optique Graduate School, CNRS, Laboratoire Charles Fabry, 91127, Palaiseau, France</p>	<p>10 LYNRED III-V and II-VI sub-10µm HOT Technologies development</p> <p>David BILLON-LANFREY, Pierre JENOUVRIER, Olivier GRAVRAND, Clément LOBRE, Cédric MARTIN, Gulnar DAGHER, Cécile GREZES, Alexandre KERLAIN, Christine CASSILLO, Nicolas MORISSET, Alexandre BRUNNER, Nicolas PÉRÉ-LAPERNE, Laurent RUBALDO* 1LYNRED, Veurey-Voroize, France 2CEA/Leti, Grenoble, France</p>
12:10	<p>84 Digital setup for measurement of very high limiting resolution on new generation of night vision intensifier tubes</p> <p>Pierre JARRIGE*, Mustapha CONDE Exosens, France</p>	<p>31 Toward a Femtosecond Laser Written Photonic Integrated Circuit for Hyperspectral Imaging</p> <p>Matthieu LANCRY, Guillaume DRUART, Sébastien BOURDEL*, Olivier GAZZANO, Maxime CAVILLON 1DOTA, ONERA, Palaiseau, France 2ICMMO - CNRS - Université Paris-Saclay, Orsay, France</p>	<p>23 Improved High frequency bandwidth Magnetic Fast Steering Mirror for Free-Space Optical communication (FSO) using Model-based control</p> <p>Clément COTE*, Xavier DELEPINE, Olivier SOSNICKI, Théo SIMON, Marc FOURNIER, Alexandre PAGES, Jocelyn REBUFA, Frank CLAEYSSEN CEDRAT TECHNOLOGIES, France</p>
12:30	LUNCH BREAK & EXHIBITION		

DAY 3 - THURSDAY 25 JANUARY 2024

	ROOM 1	ROOM 2
	SESSION 16	SESSION 17
	SIMULATION AND AUGMENTED REALITY	SENSORS AND COMPONENTS - 4
Chair	Chairperson : François COURSAGET, NIT	Chairperson : Claire VALENTIN, EXOSENS
14:00	<p>77 Solid Rocket Motor Exhaust Plume Infrared Signature Simulations: Supersonic Flight Effect Study</p> <p>Valérie RIALLAND*, Adrien LANGENAI, Stéphane LANGLOIS, Sylvain ROMMELUERE, Juliette AUBRÉE 1DOTA, ONERA, Palaiseau, France 2DMPE, ONERA, Palaiseau, France 3DMPE, ONERA, Toulouse, France</p>	<p>70 Next Generation of High Performance Detectors for Anthropogenic Gas Detection</p> <p>Richard THÖT, Michael SENDNER, Wolfgang HORN, Kai Uwe GASSMANN* Space, AIM Infrarot-Module GmbH, Heilbronn, Allemagne</p>
14:20	<p>4 Advanced optical modeling of the 34X3 paint covering the DGA CUBI object</p> <p>Alain LE GOFF SDSA/CGN2, DGA Maîtrise de l'information, Rennes Cedex 9, France</p>	<p>18 Study of the spinel's potential for optronic applications</p> <p>Florent MICHAUX, Edouard FLAVIN, Johan PETIT, Remy ROUYER, Christophe COUREAU, Lucile LALLEMANT, Rodolphe MACAIGNE* 1Solcera, Evreux, France 2ONERA, Palaiseau, France 3MBDA FRANCE, Paris, France</p>
14:40	<p>3 Modeling and Simulating EO/IR Systems: Enhancing Performance Analysis and Thermal Signatures through a Physics-Based Co-Simulation Workflow</p> <p>Luis Felipe MERCADO GUTIERREZ*, Fabien BASTIDE Engineering, Ansys Inc, Rochester, Etats-Unis</p>	<p>7 Improved reliability of Thales rotary cooler</p> <p>Simon-Didier VENZAL*, Christophe VASSE, Sylvain LASSALLE, Simon-Didier VENZAL Technical dpt, Thales LAS France SAS, Blagnac, France</p>
15:00		<p>27 An Analysis of the Supply Chain for Infrared Imaging Systems</p> <p>Jason ZEIBEL C5ISR Center / Research and Technology Integration Directorate, US Army, Fairfax Station, Etats-Unis</p>
15:20	END OF OPTRO2024	