

OPTRO2020 PRELIMINARY PROGRAMME

Update 2019-12-20

DAY 1 - TUESDAY 28 JANUARY 2020

09:00	REGISTRATION – MORNING COFFEE
	PLENARY SESSION
09:40	WELCOME ADDRESSES
09:50	OPTRO 2020 HONORARY PRESIDENT KEYNOTE ADDRESS
10:10	INTRODUCTION TO OPTRO 2020
10:50	KEYNOTES ADDRESSES Agencies and Official Organizations
12:30	LUNCH BREAK
	PLENARY SESSION
14:30	KEYNOTES ADDRESSES Scientific Organizations
16:00	COFFEE BREAK & EXHIBITION
16:30	SYMPOSIUM ROUND TABLE
18:00	END OF FIRST DAY PROGRAMME
20:00	OPTRO2020 DINNER (Optional)

DAY 2 - WEDNESDAY 29 JANUARY 2020

	ROOM 1	ROOM 2	ROOM 3
	SENSORS AND COMPONENTS - 1	IMAGING AND SYSTEMS - 1	LASER SENSOR AND SYSTEMS - 1
08:30	10	86	49
	Developments towards very small pitch HgCdTe focal-plane-arrays S. BISOTTO, J. ABERGEL, B. DUPONT, A. FERRON, O. GRAVRAND, O. MAILLIART, J.A. NICOLAS, S. RENET, F. ROCHETTE, J.L. SANTAILLER, A. YÉCHE CEA, FR	HGTE nanocrystals for the design of SWIR focal plane arrays C. GREBOVALI (1), S. FERRE (2), V. NOGUIER (2), A. CHU (1), B. MARTINEZ (1), C. LIVACHE (1), Y. PRADO (1), G. VINCENT (3), E. LHUILLIER (1) (1) Sorbonne Université, CNRS, Institut des NanoSciences de Paris, INSP, FR, (2) New Imaging Technologies SA, FR, (3) ONERA, FR	Coherent combining of optical parametric oscillators: challenges and experimental demonstrations P. BOURDON, R. CHTOUKI, L. LOMBARD, C. PLANCHAT, M. RAYBAUT, A. GODARD, A. DURÉCU ONERA, FR
08:50	66	65	14
	Status of science detectors developments at Lynred and CEA A. LAMOURE (1), B. FIEQUE (1), G. BADANO (2), O. GRAVRAND (2), O. BOULADE (3) (1) Lynred, FR, (2) CEA-LETI, FR, (3) CEA-IRFU, FR	ROIC glow reduction in very low flux short wave infra-red focal plane arrays for astronomy T. LE GOFF (1), N. BAIER (1), O. GRAVRAND (1), J.A. NICOLAS (1), T. PICHON (2), O. BOULADE (2), S. MOUZALI (2) (1) Univ. Grenoble Alpes, CEA-LETI, FR, (2) CEA-IRFU, FR	Femtosecond Coherent Beam Combining of 61 Fiber Amplifiers J.C. CHANTELOUP (1), I. FSAIFES (1), L. DANIAULT (1), S. BELLANGER (1), M. VEINHARD (1), J. BOURDERIONNET (2), C. LARAT (2), E. LALLIER (2), E. DURAND (3), A. BRIGNON (2) (1) Ecole Polytechnique, FR, (2) Thales TRT, FR, (3) Thales LAS, FR
09:10	21	71	69
	Pitch reduction and MTF optimization of HgCdTe infrared detectors J. ABERGEL, F. ROCHETTE, S. BISOTTO, A. YECHE, O. GRAVRAND, F. BOULARD, S. GOUT, X. BAUDRY, A. FERRON CEA LETI Minattec, FR	Predictive controllers for high dynamic atmospheric turbulence compensation. Application to Low-Earth Orbit satellite tracking L. PRENGERE (1), C. KULCSÁR (1), H.F. RAYNAUD (1), J.M. CONAN (2) (1) Laboratoire Charles Fabry, FR, (2) ONERA, FR	Towards a high power and high efficiency Holmium doped fiber laser at 2.1 μm J. LE GOUËT (1), F. GUSTAVE (1), P. BOURDON (1), T. ROBIN (2), A. LAURENT (2), B. CADIER (2) (1) ONERA, FR, (2) iXblue Photonics, FR
09:30	37	76	59
	Optimization of cooled MCT LWIR modules by introducing a p-on-n detector technology H. LUTZ, R. BREITER, D. EICH, H. FIGGEMEIER, S. HANNA AIM Infrarot-Module GmbH, DE	Digital readout integrated circuit for small pixel pitch cooled infrared detectors in Lynred N. RICARD, L. RUBALDO, G. VOJETTA, A. BRUNNER, L. BAUD, P. JENOUVRIER Lynred, FR	30 W gain-switched holmium-doped fiber laser at 2.09 μm E. LALLIER Thales Research & Technology, FR
09:50	4	70	67
	Development of HgCdTe infrared detectors by heterogeneous processing T. MELLA, J. ABERGEL, S. GOUT, S. RENET, J.L. SANTAILLER, L. DI CIOCCIO CEA, FR	Multi-user wide field stereovision system with infrared technology for rotorcrafts navigation in Degraded Visual Environment C. PEYROT, T. JAKOWLEFF, P. VAQUETTE, L. HURÉ, E. KLING Safran Electronics & Defense, FR	Target-in-the-loop coherent combining of 7 fiber lasers: first results P. BOURDON (1), H. JACQMIN (1), L. LOMBARD (1), B. AUGÈRE (1), A. DURÉCU (1), D. GOULAR (1), R. DOMEL (1), D. FLEURY (1), C. PLANCHAT (1), B. ROUZÉ (1), T. HUET (1), B. TANGUY (1), B.S. TAN (2), J.W. LAM (2), K. LIM (2) (1) ONERA, FR, (2) DSO National Laboratories, SG
10:10	COFFEE BREAK & EXHIBITION		

DAY 2 - WEDNESDAY 29 JANUARY 2020

	ROOM 1	ROOM 2	ROOM 3
	SENSORS AND COMPONENTS - 2	IMAGING AND SYSTEMS - 2	LASER SENSOR AND SYSTEMS - 2
10:40	44 Quantum sensors for timing, navigation and RF sensing L. MAYER (1), P. BERGER (1), A. BRIGNON (1), T. DEBUSSCHERT (1), M. DUPONT-NIVET (1), J. KERMORVANT (2), L. MORVAN (1), P. NOUCHI (1), J. TRASTOY (1), F. VAN DAU (1), D. DOLFI (1) (1) Thales Research and Technology, FR, (2) Thales SIX GTS, FR	54 Colorimetry and multispectral imaging using four filter discrimination in the shortwave infrared M. GERKEN, H. SCHLEMMER Hensoldt Optronics, DE	11 Laser Diodes and Photodiodes for LiDAR D. BOIREAU, P. ROUTHIER, E. DESFONDS Excelitas Technologies, CA
11:00	74 Nanophotonics for high speed sampling and RF oscillators I. GHORBEL (1, 2), L. CONSTANS (2), S. COMBRIÉ (1), A. MARTIN (1), L. MORVAN (1), F. RAINERI (2), R. BRAIVE (2), A. DE ROSSI (2) (1) Thales Research & Technology, FR, (2) Centre de Nanosciences et de Nanotechnologies, FR	35 Test of a LWIR cryogenic multispectral infrared camera for methane gas leak detection and quantification in TADI platform and ESPERCE site G. DRUART (1), P.Y. FOUCHER (1), S. DOZ (1), X. WATREMEZ (2), S. JOURDAN (3), E. VANNEAU (4), F. BRYGO (5) (1) ONERA, FR, (2) TOTAL, FR, (3) Lynred, FR, (4) Noxant, FR, (5) Bertin, FR	83 High beam quality quantum cascade lasers for high power applications M. CARRAS, G. MAISONS, J. ABAUTRET mirSense, FR
11:20	57 InP/SiN hybrid integrated laser sources for sensing and metrology F. VAN DIJK (1), F. DUPORT (1), S. BOUST (1), H. EL DIRANI (2), Y. ROBERT (1), A. LARRUE (1), Y. LAURENE (3), C. PETIT-ETIENNE (3), E. VINET (1), S. KERDILES (2), E. PARGON (2), M. VALLET (4), C. SCIANCALEPORE (2), J.M. FEDELI (2) (1) III-V Lab, FR, (2) Univ. Grenoble Alpes, CEA-Leti, FR, (3) Univ. Grenoble Alpes, CNRS, LTM, FR, (4) Univ. Rennes, CNRS, Institut FOTON, FR	46 Calibration and measurement precision of division-of-focal-plane polarization sensors F. GOUDAIL, S. ROUSSEL, M. BOFFETY Laboratoire Charles Fabry, FR	45 DFB-ridge laser diodes at 852 nm and 894 nm for Cesium atomic clocks M. KRAKOWSKI, M. GARCIA, C. THÉVENEAU, P. AFUSO ROXO, A. LARRUE, P. RESNEAU, Y. ROBERT, E. VINET, J.P. LEGOEC, O. PARILLAUD, B. GÉRARD III-V Lab, FR
11:40	61 Improving laser communication with Multi-Plane Light Conversion technology N. LAURENCHET, A. BILLAUD, D. ALLIOUX, P. JIAN, O. PINEL, G. LABROUILLE Cailabs, FR	29 Multispectral plenoptic infrared camera for remote sensing applications F. DE LA BARRIERE (1), G. DRUART (1), J.B. VOLATIER (1), S. JOURDAN (2), E. VANNEAU (3), F. BRYGO (4) (1) ONERA, FR, (2) LYNRED, FR, (3) NOXANT, FR, (4) BERTIN, FR	58 Development of a Dual-Frequency VECSEL for a compact CPT clock J. COTXET (1), G. GREDAT (2), F. GUTTY (1), F. TRICOT (1), G. BAILI (1), P. NOUCHI (1), D. DOLFI (1), R. SCHMEISSNER (3), S. GUÉRANDEL (4), D. HOLLEVILLE (4), F. BRETENAKER (2), F. GOLDFARB (2), H. LIU (2), G. LUCAS-LECLIN (5), S. JANICOT (5), P. GEORGES (5), I. SAGNES (6), G. BEAUDOIN (6) (1) Thales Research & Technology France, (2) Laboratoire Aimé Cotton, CNRS, FR, (3) Thales AVS-MIS, FR, (4) LNE-SYRTE, Observatoire de Paris, CNRS, FR, (5) Laboratoire Charles Fabry, IOGS, CNRS, FR, (6) Centre de Nanosciences et Nanotechnologie (C2N), CNRS, FR
12:00	55 AlGaIn focal plane array detectors for the solar-blind ultraviolet regime R. REHM, R. DRIAD, L. KIRSTE, S. LEONE, T. PASSOW, F. RUTZ, L. WATSCHKE, A. ZIBOLD Fraunhofer Institute for Applied Solid State Physics IAF, DE	89 THALES Hand-Held-Thermal-Imager (HHTI) New Generation P. JEROT Thales, FR	
12:20	LUNCH BREAK & EXHIBITION		

DAY 2 - WEDNESDAY 29 JANUARY 2020

	ROOM 1	ROOM 2	ROOM 3
	SENSORS AND COMPONENTS - 2	IMAGING AND SYSTEMS - 3	LASER SENSOR AND SYSTEMS - 3
14:00	56 Challenges and perspectives with freeform optics <u>R. GEYL</u> Safran Reosc, FR	16 Recent Improvements on the Thermal Infrared Hyperspectral Images of the SIELETTERS Airborne System <u>O. GAZZANO</u> , Y. FERREC, C. COUDRAIN, L. ROUSSET-ROUVIÈRE ONERA, FR	48 Single-frequency Tm:YAP laser tunable between 1.94 and 1.96 μm for the generation of LWIR radiation <u>Q. BERTHOMÉ</u> (1, 2), A. GRISARD (3), E. LALLIER (3), B. FAURE (1), G. SOUHAITÉ (1), J.M. MELKONIAN (2), A. GODARD (2) (1) Teem Photonics, FR, (2) DPHY, ONERA, FR, (3) Thales Research & Technology, FR
14:20	24 3D additive manufacturing of chalcogenide preforms : a new approach for the elaboration of chalcogenide microstructured optical fibers <u>J. CARCREFF</u> (1), F. CHEVIRÉ (1), E. GALDO (1), R. LEBULLENGER (1), A. GAUTIER (1), J.L. ADAM (1), L. BRILLAND (2), G. RENVERSEZ (3), J. TROLES (1) (1) Univ Rennes, CNRS, ISCR-UMR 6226, FR, (2) Selenoptics, FR, (3) Aix-Marseille Univ, CNRS, Centrale Marseille, Institut Fresnel, UMR 7249, FR	20 Studies of new architectures of compact spectro-imagers for atmospheric sciences <u>N. CARIQU</u> (1, 2), F. DE LA BARRIÈRE (1), Y. FERREC (1), N. GUERINEAU (1) (1) ONERA, FR, (2) CNES, FR	51 Compact tunable laser source emitting in the LWIR for standoff gas sensing <u>M. FAVIER</u> (1), B. FAURE (1), G. SOUHAITÉ (1), J.M. MELKONIAN (2), A. GODARD (2), A. ARNAUD (3), E. LALLIER (3) (1) Teem Photonics, FR, (2) ONERA, FR, (3) Thales Research and Technology, FR
14:40	53 Design-to-technology for Night Vision <u>P. FERREYRE</u> (1), P. KUNTZ (1), B. RÉMI (2) (1) Teledyne-e2v, FR, (2) IPNL, FR	34 Key performance parameters required for hyperspectral imaging use <u>H. HANNU</u> Specim, Spectral Imaging Ltd., FI	38 LED pumping for rugged and long lifetime lasers systems <u>P. PICHON</u> , H. TALEB, F. DRUON, P. GEORGES, F. BALEMBOIS Laboratoire Charles Fabry, IOGS, FR
15:00	19 Design Strategies of three mirror design with freeform surfaces <u>L. DUVEAU</u> (1), G. DRUART (1), E. HUGOT (2), T. LEPINE (3) (1) ONERA, FR, (2) Aix-Marseille Univ, CNRS, CNES, LAM, FR, (3) Univ. Lyon, Laboratory Hubert Curien, CNRS, FR	28 Camera system for improved environmental awareness <u>R. BAUMANN</u> First Sensor Mobility GmbH, DE	77 Self-registered LIDAR and polarimetric images in real time: Application to detection of small cross-section objects <u>J. RIU</u> (1), S. ROYO (2), P. GARCIA-GÓMEZ (1), J.R. CASAS (2) (1) Beamagine SL, ES, (2) UPC, ES
15:20	COFFEE BREAK & EXHIBITION		

DAY 2 - WEDNESDAY 29 JANUARY 2020

	ROOM 1	ROOM 2	ROOM 3
	SENSORS AND COMPONENTS - 4	PHOTONICS RANDT AND EMERGING TECHNOLOGIES	SIGNAL, IMAGE PROCESSING AND ARTIFICIAL INTELLIGENCE - 1
16:00	80 A new read-out method of dielectric bolometers with a few μK sensitivity A.H. WALENTA, H.W. SCHENK University of Siegen, DE	81 Metasurface modeling by use of the Fast Multipole Method A. GOURDIN (1), D. FELBACQ (2), P. GENEVET (3) (1) Safran E&D, L2C, FR, (2) L2C, FR, (3) CRHEA, FR	25 A Generative Adversarial Neural Network Approach to Demosaicing Integrated Microgrid Polarimeter Imagery G. SARGENT, B. RATLIFF, V. ASARI University of Dayton, US
16:20	12 Infrared unipolar X_{Bn} and X_{Bp} superlattice photodetectors U. ZAVALA-MORAN (1), R. ALCHAAR (2), J.P. PEREZ (2), J.B. RODRIGUEZ (2), F. DE ANDA (1), P. CHRISTOL (2) (1) IICO, UASLP, Mexique, (2) IES, University of Montpellier, FR	60 10 PetaWatts Lasers for Extreme Light Applications F. LUREAU (1), G. MATRAS (1), S. LAUX (1), O. CHALUS (1), C. RADIER (1), O. CASAGRANDE (1), S. RICAUD (1), L. BOUDJEMAA (1), C. SIMON-BOISSON (1), D. URSESCU (2), I. DANCUS (2) (1) Thales LAS France, FR, (2) IFIN-HH, RO	31 Real-Time Embedded Video Denoiser Prototype A. PETRETO (1, 2), T. ROMERA (1), F. LEMAITRE (2), I. MASLIAH (2), B. GAILLARD (3), M. BOUYER (2), Q. MEUNIER (2), L. LACASSAGNE (2) (1) Lheritier, FR, (2) LIP6, FR
16:40	43 A novel MOSFET-based uncooled sensor for disruptive IRFPAs A. ALBOUY (1), J.J. YON (1), P. LEDUC (1), G. DUMONT (1), A. ALIANE (1), F. BALESTRA (2) (1) Univ. Grenoble Alpes, CEA, LETI, FR, FR, (2) Univ. Grenoble Alpes, CNRS, Grenoble INP, IMEP-LAHC, FR	50 Ruggedised Opto-electronic Components for High Speed (Multi-Gigabit) Digital and “RF-over-Fibre” Optical Links D. BASUITA (1), R. LOGAN (2) (1) Glenair UK Limited, UK, (2) Glenair Inc, US	26 Automated hostile fire detection using uncooled thermal imaging C. BARBANSON, A. WOISELLE, J. BUDIN Safran, FR
17:00	13 Low SWaP MWIR detector and a video core G. GERSHON (1), D. CHEN (1), R. GAZIT (1), A. KARABCHEVSKY (1), Z. KIBLITSKI (1), O. MAGEN (1), B. MILGROM (2), T. MARKOVITZ (1), R. OHAYON (1), K. ROZENSHEIN (1), N. SYREL (1), I. VLADOVSKY (1), M. WEINSTEIN (1), I. SHTRICHMAN (1) (1) SCD, IL, (2) IMOD, IL	52 Laser power stabilisation investigations for a cesium clock optical bench compatible with a dual-frequency VECSEL J. COTXET (1, 2), F. GUTTY (1), F. TRICOT (3), D.H. PHUNG (2), G. BAILI (1), R. SCHMEISSNER (3), P. NOUCHI (1), D. DOLFI (1), D. HOLLEVILLE (2), S. GUÉRANDEL (2) (1) Thales Research & Technology France, FR, (2) LNE-SYRTE, Observatoire de Paris, Université PSL, CNRS, Sorbonne Université, FR, (3) Thales AVS, FR	6 Scene motion detection in the presence of atmospheric optical turbulence with performance analysis using numerical wave simulation data and ground truth R. VAN HOOK United States Air Force, US
18:00	COCKTAIL & OPTRO AWARDS - EXHIBITION AREA		
20:00	END OF SECOND DAY PROGRAMME		

DAY 3 - THURSDAY 30 JANUARY 2020

	ROOM 1	ROOM 2	ROOM 3
	SENSORS AND COMPONENTS - 5	SPACE APPLICATIONS - 1	SIGNAL, IMAGE PROCESSING AND ARTIFICIAL INTELLIGENCE - 2
08:30			
	5 Progress Towards On-Chip Photonic Data Transfer in Cryogenic Digital Readout Circuitry <u>J. ZEIBEL</u> US Army Night Vision Lab, US	63 Optical capabilities for observation of LEO objects <u>S. VOUREC'H</u> , G. FOURNIER, L. HENNEGRAVE ArianeGroup, FR	42 Uncertainty estimation for robust small object detection <u>C. ABGRALL</u> , G. HENAFF Thales LAS France, FR
08:50			
	17 Key parameters for infrared detectors range improvement in the SWAPc and pitch reduction context J. BERTHOZ (1), <u>L. RUBALDO</u> (1), A. BRUNNER (1), G. VOJETTA (1), M. MAILLARD (1), N. JOMARD (1), S. COURTAS (1), F. ROCHETTE (2) (1) Lynred, FR, (2) CEA, FR	62 Large-Stroke Fast Steering Mirror for Space Free-Space Optical communication <u>F. CLAEYSSSEN</u> , K. BENOIT, G. AIGOUY, O. SOSNICKI, M. FOURNIER Cedrat Technologies, FR	39 Hyperspectral target detection using deep neural networks <u>L. GIRARD</u> , V. ROY Defence Research and Development Canada, CA
09:10			
	23 Simultaneous Detection in two Spectral IR-Bands: AIM's Bispectral MCT-Detectors <u>D. EICH</u> , C. AMES, R. BREITER, H. FIGGEMEIER, S. HANNA, H. LUTZ, K.M. MAHLEIN, T. SCHALLENBERG, A. SIECK, J. WENISCH AIM Infrarot-Module GmbH, DE	64 Complete Optical System for Space Applications <u>C. SELLIER</u> 3D PLUS, FR	78 Automatic Target Detection and Classification using Artificial Intelligence <u>V. FIGUÉ</u> , <u>R. PICOT</u> , Y. DUMORTIER, J. BUDIN Safran Electronics & Defense, FR
09:30			
	73 Advanced SWIR Sensor for Active Imaging and other Applications <u>S. FERRÉ</u> (1), M. SCHWEITZER (2) (1) Material Expert, FR, (2) Application Field Engineer, FR	27 Cryogenic Infrared Relay Optics Design And Testing <u>C. SIEMENS</u> , T. GROSS, M. HINZ Hensoldt Optronics GmbH, DE	85 Creating a MATISSE component for NV-IPM <u>G. SWIATHY</u> (1), J. REYNOLDS (2), M. LE PORT (1) (1) DGA / DGA Aeronautical Systems, FR, (2) US Army CCDC C5ISR NVESD, US
09:50			
	84 InfraRed Optical Testing for High Precision Metrology Control Using Shack-Hartmann Wavefront Technology <u>G. TISON</u> Imagine Optic, FR	30 Radiation induced degradation of optoelectronic sensors <u>C. INGUIMBERT</u> (1), T. NUNS (1), D. HERVÉ (2), A. VRIET (2), J. BARBERO (3), J. MORENO (3), A. NEDELCO (4), S. DUCRET (4) (1) ONERA, FR, (2) Sodern, FR, (3) Alter Technology, FR, (4) Lynred, FR	41 Ballistic Missile Infrared Signature: Towards a Surrogate Model <u>V. RIALLAND</u> , A. NICOLE, A. SITJES ALOMAR, G. AURELIEN, S. LEFEBVRE ONERA, FR
10:10	COFFEE BREAK & EXHIBITION		

DAY 3 - THURSDAY 30 JANUARY 2020

	ROOM 1	ROOM 2	ROOM 3
	SENSORS AND COMPONENTS - 6	SPACE APPLICATIONS - 2 / DEFENCE TECHNOLOGY RESEARCH WITH EDA - 1	MODELISATION / AIRBORNE APPLICATIONS - 1
10:40			
	32 From Development and Qualification to Production of Ricor's Innovative SWaP-C Cryocoolers for HOT detector A. FILIS, I. NACHMAN, S. SOBOL, M. CARMIEL, V. SEGAL, I. VAINSHTEIN, A. ASHKENAZI, G. FRANKEL, S. BARUCH, O. BEN DAVID, D. GOVER Ricor, IL	8 Coherent characterization of backscattering in LISA instrument V. KHODNEVYCH, M. LINTZ, N. DINU-JAEGER, D. HUET Artemis, OCA, FR	79 NATO SET-249 Joint Measurement Campaign on Laser Dazzle Effects in Airborne Scenarios B. EBERLE (1), G. RITT (1), M. KOERBER (1), B. SCHWARZ (1), S. TIPPER (2), C. WESTGATE (2), W. KINERK (2), O. STEINVALL (3), J. ÖHGREN (3), M. VANDEWAL (4), C. SANTOS (4) (1) Fraunhofer IOSB, DE, (2) DSTL, UK, (3) FOI, SE, (4) RMA, BE
11:00	33 High-power, high-availability Stirling coolers T. BENSCHOP, D. WILLEMS, R. ARTS, P. BOLLENS, B. DE VEER Thales Cryogenics, NL	90 <i>Space applications (TBC)</i>	9 Threat-agnostic Electro-Optical countermeasure against Infrared seekers G. TOSTENE, F. SEUBE, V. PARTHENAY, P. HOULES DGA, FR,
11:20	3 The RMs1 cooler, an efficient, flexible and reliable cooler C. VASSE (1), V. ABOUSLEIMAN (1), J.Y. MARTIN (1), J.M. CAUQUIL (1), T. BENSCHOP (2) (1) Thales LAS, FR, (2) Thales Cryogenics, FR	91 <i>Space applications (TBC)</i>	68 Hostile Fire Indicator using uncooled Long-Wavelength Infrared Detectors A. PICARD, L. BROUANT, P. VAQUETTE Safran Electronics & Defense, FR
11:40	87 Optronic Systems in today's Naval Warfare P. LE CLÉACH Naval Group, FR	72 Strategic Research Agenda for Optronics EDA CapTech Optronics J. DIJK (1), S. MAGRINI (2), G. UDA (3), F. BERIZZI (4) (1) TNO, NL, (2) Freelance business consultant, IT, (3) Leonardo, IT, (4) EDA, BE	88 THALES Spy'Ranger mini UAV systems P. JEROT Thales, FR
12:00		18 The project SPIDVE - Study on EO Sensors Performance Improvement in Degraded Visual Environment R.A. ROSSI (1), J. VITI (1), G. UDA (1), G. TOCI (2), B. PATRIZI (3), M. VANNINI (3), A. MASINI (4) (1) Leonardo, IT, (2) CNR, IT, (3) INO, IT, (4) FlyBy, IT	75 Operational airborne lidar sensor for 3D wind measurement A. DOLFI-BOUTEYRE, B. AUGERE, M. VALLA, A. DURÉCU, D. GOULAR, F. GUSTAVE, C. PLANCHAT, D. FLEURY, T. HUET, C. BESSON ONERA, FR
12:20	LUNCH BREAK & EXHIBITION		

DAY 3 - THURSDAY 30 JANUARY 2020

	ROOM 1	ROOM 2	ROOM 3
	EPIC	DEFENCE TECHNOLOGY RESEARCH WITH EDA - 2	AIRBORNE APPLICATIONS - 2
	CHAIRMAN : Jose POZO, EPIC		
14:00	EPIC Roundtable on Quantum Optronics (European Photonics Industry Consortium)	36 Real-Time Target Detection in Maritime Scenarios based on YOLOv3 Model A. BETTI, B. MICHELOZZI, A. BRACCI, A. MASINI Flyby srl, IT	2 Challenges raised by new WAMI sensors C. DEANTONI, I. GAZEYEFF Thales LAS France, FR
14:20		15 Architectures study for sensor integration in RPAS E. PEREZ (1), A. JIMENEZ (1), V. POLO (2), M. ALFAGEME (2), D. LLAMAZARES (2), S. SIMON (2) (1) Everis Aeroespacial y Defensa, ES, (2) DAS Photonics, ES	82 IR image Processing and Validation Methodology applied to Airborne Self-Protection systems P. OSMA, Á. PUEYO, J. MUÑOZ Indra, ES
14:40		1 DEBELA - DEtect BEfore LAunch, an EDA CAT-B project proposal C. EISELE (1), D. SEIFFER (1), M.T. VELLUET (2), M. HENRIKSSON (3), L. SJÖQVIST (3) (1) Fraunhofer IOSB, DE, (2) ONERA, FR, (3) FOI, SE	22 Toward UAV based Compact Thermal Infrared Hyperspectral Imaging Solution for Real-time Gas Detection Identification and Quantification S. BOUBANGA TOMBET, E. GUYOT, M. CHAMBERLAND Telops, FR
15:00		7 LASERONUAV – Development of a laser microdiode in 2.1um as countermeasure system from RPAS B. COLOMER (1), R. ORTIZ (1), L. ROSO (2), M. RICO (2) (1) AERTEC, ES, (2) CLPU, ES	
15:20			
16:00	END OF OPTRO2020		