

Technical program

Tuesday 26th November 2019			
13:00	Registration		
14:00	Conference opening		
14:30	Fiber optics applications and evaluations in aerospace composite structures: Japanese perspective and JASTAC project	Shu Minakuchi	The University of Tokyo
15:30	A review of calibration phantom fabrication methods for optical coherence tomography (OCT)	Yang Lu(a) *, Neil Gordon(a), David J. Webb(a), David Robinson(b), Kate Sugden(a)	(a)Aston Institute of Photonic Technologies, Aston University, Birmingham B4 7ET, UK (b)Arden Photonics Ltd., Royston House, 267 Cranmore Boulevard, Solihull, B90 4QT, UK
16:00	Reliable Expanded Beam Connectors for Single Mode Optical Fiber Sensor Applications in Harsh Environment	Xavier Insou (a)(c), Lionel Quéstel (b), Sébastien Claudot (c), Monique Thual(a)	(a)Institut Foton, CNRS UMR6082, Université de Rennes 1, 6 rue de Kérampont, F-22305 Lannion, France (b)IDIL Fibres Optiques, 21 rue Louis De Broglie 22300 Lannion, France (c)Souriau-Sunbank Connection Technologies, RD323, 72470 Champagné, France
16:30	Coffee break		
17:00	Basic characterization of optical fibers	Antonino Alessi(a) *, Simonpietro Agnello(b), Jochen Kuhnhen(a)	(a)Fraunhofer Institute for Technological Trend Analysis INT, Business Unit Nuclear Effects in Electronics and Optics, Appelsgarten 2,Euskirchen 53879, Germany (b)Dipartimento di Fisica e Chimica-Emilio Segre` Università Degli Studi Palermo, via Archirafi 36, Palermo 90123, Italy
17:30	Parametric study on the manufacturing parameters of sol-gel optical waveguides for sensing	Maxime Royon(a) *, Damien Jamon(a), Emmanuel Marin(a), Francis Vocanson(a), Anthony Cazier(a), Frédéric Celle(a), Sylvain Girard(a), Yves Jourlin(a)	(a)Université de Lyon, UJM-Saint-Etienne, CNRS, UMR5516, Laboratoire Hubert Curien, F-42023, Saint Etienne, France
Wednesday 27th November 2019			
09:00	Gain in laser diodes	Massimo Vanzi	University of Cagliari
10:00	Coupled radiation and temperature effects on Erbium-doped fiber amplifiers	Marine Aubry(a,b,c,d) *, Arnaud Laurent(b), Thierry Robin(b), Luciano Mescia(d), Julien Mekki(a), Emmanuel Marin(c), Youcef Ouerdane(c), Aziz Boukenter(c), Sylvain Girard(c)	(a)CNES, 18 Avenue Edouard Belin, Toulouse 31400, France (b)ixblue, Rue Paul Sabatier, Lannion 22300, France (c)Université de Lyon, UJM-Saint-Etienne, CNRS, UMR5516, Laboratoire Hubert Curien, Bât. F 18 Rue Pr. Benoît Lauras, Saint Etienne 42000, France (d)Politecnico di Bari, Via Edoardo Orabona 4, Bari 70126, Italy
10:30	Coffee break		
11:00	Benefit of In-Service Rayleigh distributed loss measurement for the reliability of distributed fiber sensing.	André Champavère(a,b), Alexandre Cebollada (c)	(a)VIAVI Solutions R&D Consultant, VIAVI Solutions, Saint-Etienne and 42330, France (b)ISROS WG4 Sub-group 4 Leader - Distributed Fibre Optic Sensing (c)VIAVI Solution – R&D Project Lead, VIAVI Solutions, Saint-Etienne and 42330, France
11:30	Reliability of fibre Bragg grating sensors in polymer optical fibre	David Webb	Aston Institute of Photonic Technologies, Aston University, Birmingham, B4 7ET, UK
12:00	Lunch break + industrial exhibit		
14:00	Influence of temperature, dose rate and optical power on the radiation-induced attenuation of a commercial rad-hard optical fiber	Matthieu CAUSSANEL(a) *, Hervé DUVAL(a), Olivier GILARD(b), Thomas GRIMAUD(c), Alain PASTOURET(d)	(a) PROMES-CNRS laboratory, Rambla de la thermodynamique, Tecnosud, 66100 Perpignan, France (b) CNES, BPI 1412, Centre National d'Etudes Spatiales, 18 av. E. Belin, 31401 Toulouse Cedex 9, France (c) Prysmian S.p.A., Viale Sarca, 222, 20126, Milano, Italy (d) Draka Comteq France SAS, Parc des Industries Artois Flandres, 644 bd Est, Billy Berclau 62138 Haisnes Cedex, France
14:30	Distributed temperature and strain measurement with millimetre-order spatial resolution based on Brillouin optical frequency domain analysis	(a)Romeo Bernini, (b)A. Coscetta, (b)Ester Catalano, (b)Luigi Zeni, (b,*)Aldo Minardo	(a)Istituto per il Rilevamento Elettromagnetico dell'Ambiente, CNR, Via Diocleziano 328, 80124 Napoli, Italy (b)Department of Engineering, Università della Campania "Luigi Vanvitelli", Via Roma 29, 81031 Aversa, Italy
15:00	Review on failure mechanisms in GaN/GaN MQW LED for lighting application	Yannick Deshayes	Laboratoire de l'Intégration du Matériau au Système (Université de Bordeaux)
16:00	Coffee break		
16:30	High-power LASER diode for resonant pumping at 1532nm in space mission	Alexandre Bordet(a,b)	(a)Thales, CNES Laboratoire d'expertise, 18 Avenue Edouard Belin, 31401 Toulouse Cedex, France (b)Laboratoire de l'Intégration du Matériau au Système (IMS)-CNRS UMR-5218, Université de Bordeaux, 351 cours de la Libération, 33405 Talence, France
17:00	Area downsizing effects on electrical performance and robustness of triple junction solar cells for CPV applications	Pierre Albert(a,b), Abdelatif Jaouad(a) *, Maxime Darnon(a), Maïté Volatier(a), Yannick Deshayes(b), Laurent Béchou(b) & Vincent Aimez(a)	(a)Laboratoire Nanotechnologies et Nanosystèmes (LN2)-CNRS UMI-3463, Institut Interdisciplinaire d'Innovation Technologique (3IT), Université de Sherbrooke, 3000 boul. de l'Université, Sherbrooke, Québec, J1K 2R1, Canada (b)Laboratoire de l'Intégration du Matériau au Système (IMS)-CNRS UMR-5218, Université de Bordeaux, 351 cours de la Libération, 33405 Talence, France

Thursday 28th November 2019

09:00	Implementation of accelerated tests	André Cabarbaye	CAB Innovation
10:00	Delta-evaluation of a European optocoupler for space applications	Matteo Bregoli*, Silvia Ceriani	Optoelettronica Italia Srl (Optoi), Via Vienna 8, 38121 Gardolo (TN), Italy
10:30	Coffee break		
11:00	Dynamic test of batch of image sensors under thermal stress	Charlu TIZON(a), Kevin SANCHEZ(b), Rachel GRUNEISEN(c),*	(a) BiBench Systems, 31 Allée Jules Guesdes, Le Village by CA, 31000 Toulouse, France (b) C.N.E.S. (French Space Agency), 18 Avenue Edouard Belin, 31400 Toulouse, France (c) Sodern (Ariane Group), 20 Avenue Descartes, 94450 Limeil-Brévannes, France
11:30	Embedded optoelectronic payload design dedicated to Erbium doped fiber degradation monitoring in future 3U nanosatellite NIMPH	Arnaud Fernandez, Christophe Viallon, Olivier Llopis, Nicolas Nolhier, Gilles Bailly, Anthony Coustou, Denis Lagrange	LAAS-CNRS, Université de Toulouse
12:00	Lunch break + industrial exhibit		
14:00	Photonic integrated circuits for optoelectronic system on chip and system in package	Frédéric Van Dijk	III-V Lab campus de Polytechnique 1, avenue Augustin Fresnel 91767 Palaiseau Cedex France
15:00	Recent progresses on fiber-based technologies for radiation-rich environments	Sylvain Girard	Laboratoire Hubert Curien (Université de Lyon, UJM-Saint-Etienne)
16:00	Coffee break		
16:30	Thermal and stability characterization of a microwave optoelectronic oscillator	Christian Daniel Munoz (a) (b) *, Fabien Destic (a), Angélique Rissons (a), Margarita Varón (b)	(a)ISAE – SUPAERO, Université de Toulouse, 10 Avenue Edouard Belin, 31055, France (b)Departamento de Ingeniería Eléctrica y Electrónica, Universidad Nacional de Colombia, 11001, Colombia
17:00	Durability testing context of installed sensing on aircraft	F. Robert, M. Kolling, K. Grase, M-A. De smet,	Airbus Commercial
19:30	Gala dinner		
23:00	End of Gala dinner		

Friday 29th November 2019

09:00	Guided-mode resonance optical filters and components for embeded photonics	A. Monmayrant	LAAS-CNRS, Université de Toulouse
10:00	A systematic approach to determining Generic Integrated Photonic reliability	Thijs van Leest, Rolf Evenblij, Pim Kat	Technobis, Pyrietstraat 2, 1812 SC, Alkmaar, The Netherlands
10:30	Coffee break		
11:00	Reliability Testing of COTS Fiber Optics Transceivers for Defense, Avionics and Space Applications	Jocelyn Lauzon, Guillaume Blanchette, Pierre Cardinal	Reflex Photonics Inc., 16771 Chemin Ste-Marie, Kirkland, Québec H9H 5H3, Canada
11:30	Reliability assurance guideline for digital optical transmitter, receiver and transceiver modules	O. Gilard(a)*, A. Collier(b), L. Pujol(b), A. Bensoussan(c,d), M. Odorico(d), B. Messant(d), A. Salomon(e), S. Mariojoul€	(a)CNES-French Space Agency, (b)Radiall, (c)IRT Saint-Exupéry, (d)Thales Alénia Space, (e)Airbus Defence and Space
12:00	Fibre optique FBG on typical aircraft applications - Reliability evaluation results	C. Miguel-Guiraldo, M. Petrac	Airbus Commercial
12:30	Conference closure	ISROS2019 Organizing Committee	ISROS
13:00	Lunch break + industrial exhibit		
14:30	A350 manufacturing line tour		
17:00	End of the tour		