

## CONFERENCES PROGRAM

WEDNESDAY 13<sup>TH</sup> SEPTEMBER 2017

MORE INFO & REGISTRATION : [COMMUNICATION@LASERENLIGNE.FR](mailto:COMMUNICATION@LASERENLIGNE.FR)

### SESSION : SURFACE TEXTURING

Room n°1, with translation

09h30	<b>BILKENT UNIVERSITY</b> F. Ömer ILDAY (invited)	<i>Ablation-cooled material removal with ultrafast bursts of pulses</i>
10h00	<b>LABORATOIRE ICUBE</b> Robin PIERRON	<i>High potentials of photonic jet for industrial applications of laser micro processing</i>
10h20	<b>GF MACHINING SOLUTIONS</b> Lucia DOMINGUEZ VARELA	<i>New trends and applications of 3D laser texturing and structuring</i>
11H00	<b>BERN UNIVERSITY OF APPLIED SCIENCES</b> Beat NEUENSCHWANDER (invited)	<i>Scale-up high quality surface structuring of metals with ultra-short pulses above 100 W of average power</i>
11H30	<b>ÉCOLE CENTRALE DE LYON</b> Stéphane VALETTE	<i>Surface functionalization by femtosecond laser texturing: anti-fog and anti-ice examples</i>
11H50	<b>ALPHANOV</b> Laura GEMINI	<i>Enhanced super-hydrophobic effect on a stainless steel by high repetition-rate surface texturing</i>
12H10	<b>IREPA LASER</b> Frédéric MERMET	<i>Laser texturing for 3D functionalization</i>
14H00	<b>MUNICH UNIVERSITY OF APPLIED SCIENCES</b> Jan WINTER (invited)	<i>Improving the understanding of ultrafast laser processing of metals by experimental and simulated transient studies of reflectivity and absorption</i>
14H30	<b>IRT SAINT EXUPÉRY</b> Antoine MERCIER	<i>Laser surface preparation for adhesive bonding</i>
14H50	<b>LASEA</b> David BRUNEEL	<i>Femtosecond micromachining of complex geometries for biomedical applications</i>
15H10	<b>ALPHANOV</b> Christophe ARNAUD	<i>Potential of structuring and polishing surfaces with fiber laser on homogeneous metals</i>
16H00	<b>OXFORD LASERS</b> Céline BANSAL	<i>Recent advances in high precision laser micromachining</i>
16H20	<b>COHERENT</b> Christian MEYER	<i>Structured application work with ultrashort pulse lasers</i>

### SESSION : ADDITIVE MANUFACTURING

Room n°2, with translation

09h30	<b>IS2M-CNRS</b> Jacques LALEVÉE (invited)	<i>Towards new high performance radical and cationic photo initiating systems and examples in 3D printing resins</i>
10h00	<b>INSTITUT DE SOUDURE</b> Maxime EL KANDAOUI	<i>A review of laser beam metallic Additive Manufacturing technologies using wire feeding</i>
10h20	<b>IREPA LASER</b> Catherine SCHNEIDER-MAUNOURY	<i>Functionally graded materials with LMD-CLAD® - Application on Ti6Al4V-Mo</i>
11H00	<b>FRAUNHOFER IPK</b> Torsten PETRAT	<i>Influence of build-up strategies on component shape by using Laser Metal Deposition for additive manufacturing</i>
11H20	<b>INSTITUT MAUPERTUIS</b> Laurent DUBOURG	<i>Laser Additive Manufacturing of large parts using industrial robot</i>
11H40	<b>IREPA LASER</b> Didier BOISSELIER	<i>Influence of manufacturing strategies on large scale parts (&gt;1m) with LMD-CLAD® process - Application to the manufacturing of aerospace parts.</i>
12H00	<b>OERLIKON</b> Arkadi ZIKIN	<i>Overview of Additive Manufacturing and laser cladding technologies at Oerlikon</i>
14H00	<b>KIT</b> Martin WEGENER (invited)	<i>3D laser nano-printing: science and applications</i>
14H30	<b>LINDE</b> Stéphanie TROUSSELLE	<i>How the protection gas improves additive manufacturing of Ti-6Al-4V and IN718 parts in powder bed fusion processes.</i>
14H50	<b>PRECITEC</b> Markus KOGEL-HOLLACHER	<i>Laser Metal Deposition : innovative system technology for Additive Manufacturing processes with powder and wire</i>
15H10	<b>OXFORD LASERS</b> Céline BANSAL	<i>High performance laser-based Additive Manufacturing</i>
16H00	<b>AG TOLERIE</b> Ludovic THIVILLON	<i>Composite materials manufacturing using laser cladding</i>
16H20	<b>IREPA LASER</b> Ludovic KOUNDE	<i>Analysis and numerical modelling of the manufacturing strategies applied for the fabrication of parts with the LMD-CLAD® process</i>

# INTERNATIONAL CONFERENCE ON INDUSTRIAL LASER PROCESSING

SEPTEMBER 13-14, 2017 – STRASBOURG CONVENTION & EXHIBITION CENTER (FRANCE)

JNPLI  
2017 

THURSDAY 14<sup>th</sup> SEPTEMBER 2017

MORE INFO & REGISTRATION : [COMMUNICATION@LASERENLIGNE.FR](mailto:COMMUNICATION@LASERENLIGNE.FR)

## SESSION : TRANSPARENT MATERIALS PROCESSING

Room n°1, with translation

09h30	<b>FEMTO-ST</b> François COURVOISIER ( <i>invited</i> )	<i>Ultrafast laser micro and nano-processing with nondiffracting and curved beams</i>
10h00	<b>IREPA LASER</b> Armel BAHOUKA	<i>LaserWeldCut : an industrial oriented MEMs process fabrication project based on laser cutting and laser welding methods for glass and semi-conductors</i>
10h20	<b>AMPLITUDE SYSTEMES</b> Julie GUER	<i>Cutting and drilling of transparent materials using femtosecond laser</i>
11H00	<b>IFW JENA</b> Thomas SCHMIDT	<i>Laser processing of glass and brittle materials : an overview of processes and possibilities</i>
11H20	<b>IREPA LASER</b> Marion GSTALTER	<i>Femtosecond laser glass welding for micro processing</i>
11H40	<b>FRAUNHOFER IPT</b> Philippe ACKERMANN	<i>Non-destructive tomographical process monitoring of laser transmission welding-inline tracking of polymer welding process with OCT</i>
12H00	<b>COHERENT   ROFIN</b> Roland MAYERHOFER	<i>Laser filamentation: an outstanding step forward for the glass industry</i>

## SESSION : POWER SCALING OF ULTRAFAST LASERS

Room n°1, with translation

14H00	<b>AMPLITUDE SYSTEMES</b> Clemens HÖENNINGER ( <i>invited</i> )	<i>Femtosecond laser with &gt;100w</i>
14H30	<b>IFSW / UNIVERSITY OF STUTTGART</b> Marwan ABDOU AHMED ( <i>invited</i> )	<i>Development of high-power thin-disk lasers: status and perspectives</i>

## SESSION : JOINING OF DISSIMILAR MATERIALS

Room n°1, with translation

15H00	<b>CLFA</b> Wolfgang KNAPP & Vincent GILLET	<i>Laser texturing for heterogeneous material assemblies</i>
15H20	<b>LUXEMBOURG UNIVERSITY</b> Adham AL-SAYYAD	<i>Influence of laser ablation and plasma surface treatment on the joint strength of laser welded aluminium-polyamide assemblies</i>
15H40	<b>IREPA LASER</b> Frédérique MACHI	<i>Technological comparison of laser and electron beam for the welding of the shaft and turbo wheel</i>

## SESSION : LASER PROCESING IN SMART FACTORY & INDUSTRY 4.0 : LES LASERS POUR L'INDUSTRIE DU FUTUR

Room n°2, with translation

09h30	<b>IFSW / UNIVERSITY OF STUTTGART</b> Thomas GRAF ( <i>invited</i> )	<i>High-productivity materials processing with ultrafast lasers</i>
10h00	<b>ALPHANOV</b> Charly LOUMENA	<i>Lashare Scalp project : 3D scanner used for automated steel laser cutting in the production of vehicles for disabled drivers</i>
10h20	<b>AMPLITUDE SYSTEMES</b> Eric AUDOUARD	<i>New photonics crystal fibres for innovative lasers</i>
11H00	<b>OPHIR SPIRICON EUROPE</b> Christian DINI	<i>Non-contact laser measurement in an industrial environment</i>
11H20	<b>CLASS 4 LASER</b> Noémie DURY	<i>Surface structuring: How to take account of variability of workpieces?</i>
11H40	<b>SYNOVA</b> Helgi DIEHL	<i>Green fiber laser microjet processing of watch part</i>
12H00	<b>FRAUNHOFER ILT</b> Ulrich THOMBANSEN	<i>Accelerated technology readiness in laser-based manufacturing through laser-based equipment assessment</i>

## SESSION : BEAM SHAPING & DELIVERY

Room n°2, with translation

14H00	<b>IMAGINE OPTIC</b> Nadezda VARKENTINA	<i>New adaptive optics strategy to optimize ultra-intense laser for industrial applications</i>
14H20	<b>CAILABS</b> Lionel GARCIA	<i>Adaptive laser beam shaping based on multiple incoherent sources</i>
14H40	<b>ALPHANOV</b> Emmanuel CHALUMEAU	<i>Plug and play connector for high-power, high-energy, femtosecond single mode beam transportation</i>
15H00	<b>IREPA LASER</b> Pierre-Alain VETTER	<i>Device for beam shaping</i>
15H20	<b>QIOVA</b> Yoan DI MAIO	<i>Improvements of dynamic beam shaping for smart laser micro-processing</i>
15H40	<b>LASEA</b> Paul-Etienne MARTIN	<i>Latest developments in zero-taper laser cutting and drilling</i>