

DAY 1 - MONDAY, 3 JULY 2023

03-Jul-23 TIME	SESSION					
	AUDITORIUM 1	AUDITORIUM 2	AUDITORIUM 3	AUDITORIUM 6	AUDITORIUM 8	ROOM 1.08
09:00 - 12:30	OPENING CEREMONY					
12:30 - 14:10	LUNCH					
14:10 - 14:30	S1 - Additive Manufacturing OC103 - Defect Detection in Additively Manufactured Parts by Laser Ultrasound Tomography Bernhard Reitingner	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC421 - Multi-functional ultrasound phased array imaging Choon-su Park	S12 - Surface Methods (MPI & PT) OC32 - Bio Water Based Liquid Penetrants and Magnetics: a safer and cost-efficient solution for the future Michele Cevenini	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC47 - Modelling Crystallographic Texture Evaluation and Non-Destructive Measurement of Magnetic Anisotropy using an Electromagnetic Sensor in Interstitial Free (If) Steels Mohsen Aghadavoudi Jolfaei	S4 - NDT of Composites OC137 - Ultrasonic Inspection for aging monitoring of GFRP composites Marcella Grosso	#N/D
14:30 - 14:50	S1 - Additive Manufacturing OC93 - Inspection of Additive manufacturing parts, study of NDT solutions for WAAM Fabien Lefevre	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC130 - Phased array probes for air-coupled ultrasonic testing based on cellular polymer Mate Gaal	S12 - Surface Methods (MPI & PT) OC11 - Mechanized Dye Penetrant Internal Piping inspection system Peter Merck	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC61 - Active Infrared Thermography applied for concrete structures inspection in Nuclear Power Plants Javier De La Morena	S4 - NDT of Composites OC18 - MEMS - sensor array for non-contact ultrasonic composite panel inspection Arno Volker	#N/D
14:50 - 15:10	S1 - Additive Manufacturing OC212 - Online eddy current testing of PBF-LB/M parts using GMR sensor arrays during manufacturing Matthias Pelkner	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC107 - Thermoacoustic phased-array radiators – Theory, characteristics, and applications Daniel Hufschläger	S12 - Surface Methods (MPI & PT) OC57 - UV-A LED's in fluorescent penetrant testing and magnetic particle testing Jesko Klippstein	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC319 - Advanced Eddy Current Testing of Carbon Composites Marie Rudolfova	S4 - NDT of Composites OC232 - Air-coupled Ultrasonic Inspection of Thermoplastic Composite Structures for Aerospace Vehicles Armin Huber	#N/D
15:10 - 15:30	S1 - Additive Manufacturing OC76 - Multi-physics data registration for the improvement of Additive Manufacturing process control Jitendra Singh Rathore	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC182 - Phased-Array Approach to Air-coupled Ultrasound with Resonant Defect Excitation Timo Reindl	S12 - Surface Methods (MPI & PT) OC89 - Development of an Automatic magnetic particle flaw detector System Using Deep Learning Daisuke Nagata	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC445 - Validation through field data of LineCore, a lightweight Eddy-current sensor for the early detection of corrosion of ACSRs Nicolas Pouliot	S4 - NDT of Composites OC246 - Ad-hoc solutions for ultrasonic inspection of highly complex aircraft composite structures Sergio González	#N/D
15:30 - 15:50	S1 - Additive Manufacturing OC16 - INDUSTRIAL APPLICATION OF HIGH ENERGY CT Eberhard Neuser	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC153 - Non-Destructive Testing of Battery Pouches with Imaging Ultrasonic Techniques Artur Szewieczek	S12 - Surface Methods (MPI & PT) OC358 - UV _ Irradiation in NDT: Quo vadis Thomas Schrott	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC452 - Study on the nuclear method used in earthworks quality control of civil infrastructures José Neves	S4 - NDT of Composites OC285 - Imaging of 3D Fiber Architecture in Composites using Ultrasound Computed Tomography Mathias Kersemans	#N/D
15:50 - 16:10	S1 - Additive Manufacturing OC271 - ADVANCED X-RAY COMPUTED TOMOGRAPHY IN ADDITIVE MANUFACTURING Gerhard Zacher	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC70 - Estimating manufacturing parameters of additively manufactured 316L steel cubes using ultrasound fingerprinting Shafaq Zia	S20 - Green & Echo Technology OC31 - Work safety in magnetic particle and penetrant testing Kersten Alward	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC318 - Linear and Non-Linear Resonant Ultrasonic Testing for the Early Detection of Alkali-Silica Reaction in Concrete Klayne Silva	S4 - NDT of Composites OC406 - UT data analysis steps for development of automated detection technique of bonding defects in multi-layered structures Damira Smagulova	#N/D
16:10 - 16:40	COFFEE-BREAK					
16:40 - 17:00	S1 - Additive Manufacturing OC228 - Non-contact assessment of porosity in metal 3D printed parts by vibration spectra Alexey Tatarinov	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC211 - Ultrasonic C-scan imaging of damage in the quefreny domain Mathias Kersemans	#N/D	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC444 - Ultrasonic Phased Array application for the detection of discrepancy on laser welding Giuseppe Silipigni	S4 - NDT of Composites OC113 - Ultrasonic representation of photothermal signals to localize and identify foreign object debris in composite materials Guenther Mayr	#N/D
17:00 - 17:20	S1 - Additive Manufacturing OC273 - NDT for additive manufacturing space hardware qualification Carlos Galleguillos	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC375 - Automated echo separation in scanning acoustic microscopy for testing multi-layered electronic devices Emanuel Leipner	#N/D	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC447 - Ultrasonic Pulse-Echo inspection of backfill grout in segmental tunnel linings Roberto Felicetti	S4 - NDT of Composites OC236 - Advances in the implementation of a UT contactless inspection system in the manufacturing process of thermoplastic components for aeronautical use, within the framework of the H2020-DOMMINIO project. Roberto Giacchetta	#N/D
17:20	WELCOME RECEPTION					

04-Jul-23 TIME	SESSION				
	AUDITORIUM 2	AUDITORIUM 3	AUDITORIUM 6	AUDITORIUM 8	ROOM 1.08
09:00 - 09:20	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC428 - Online quality monitoring in the production of organo sheets by air-coupled ultrasonic testing</p> <p><u>Ralf Steinhausen</u></p>	<p>S4 - NDT of Composites OC150 - CREATION AND NON-DESTRUCTIVE CONTROL OF ELECTRIC HEATING ELEMENTS OF THE AIRCRAFT ICING PREVENTION SYSTEM</p> <p><u>Mykhail Kazakevych</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC78 - Time reversal method applied to leaky Lamb waves in an immersed layered medium</p> <p><u>Jean-Christophe Vallée</u></p>	<p>S1 - Additive Manufacturing OC310 - Near Field Microwave Probe for Metal Additive Manufacturing Imaging</p> <p><u>Luís Rosado</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC412 - Numeric Prediction of the Detail Visibility in Industrial X-Ray Computed Tomography by Human Observers</p> <p><u>Uwe Ewert</u></p>
09:20 - 09:40	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC256 - Directivity of laser generated ultrasonic waves in thermoelastic regime</p> <p><u>Xin Tu</u></p>	<p>S4 - NDT of Composites OC196 - Acoustic material testing a progressive testing method.</p> <p><u>Jörg Ritter</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC176 - Multi-dimensional data fusion study for ultrasonic and radiographic non-destructive inspections</p> <p><u>Elena Jasiuniene</u></p>	<p>S1 - Additive Manufacturing OC205 - Automated Multi-Modal In-Process Non-Destructive Evaluation of Wire + Arc Additive Manufacturing</p> <p><u>Ehsan Mohseni</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC252 - Industrial Radiography simulation with a Monte-Carlo model including full physics</p> <p><u>Andreas Schumm</u></p>
09:40 - 10:00	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC81 - Automated laser ultrasound for weld seams</p> <p><u>Norbert Huber</u></p>	<p>S4 - NDT of Composites OC91 - Investigation of Kissing Bonds in Adhesive Joints</p> <p><u>Mike Kornely</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC178 - Inductive arrays for inspection of curved structures</p> <p><u>Alexis Hernandez</u></p>	<p>S1 - Additive Manufacturing OC324 - Inline inspection of metal parts produced by Wire and Arc Additive Manufacturing (WAAM)</p> <p><u>Telmo G. Santos</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC301 - Realistic Simulation of CT Systems - An Introduction to The CTSimU2 Project</p> <p><u>Carsten Bellon</u></p>
10:00 - 10:20	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC67 - Noncontact measurement of bolt axial force during tightening processes using scattered laser ultrasonic waves</p> <p><u>So Kitazawa</u></p>	<p>S4 - NDT of Composites OC382 - A new Defects Detection Method in CFRP with non-contact Lamb Waves Propagation and Wavelet Transform Analysis</p> <p><u>Lea Lecointre</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC257 - Defect detection and sizing in components of the energy sector based on phase velocity variation of ultrasonic guided waves</p> <p><u>Renaldas Raisutis</u></p>	<p>S1 - Additive Manufacturing OC337 - Flaw Detection in Wire and Arc Additive Manufacturing Using In-Situ Wide Frequency Bandwidth Acoustic Pressure</p> <p><u>André Ramalho</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC118 - Anomalies detector on industrial radiographies: application on High Pressure Turbine Blades</p> <p><u>Clément Remacha</u></p>
10:20 - 10:40	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC42 - Combination of laser ultrasonics and thermography for enhanced defect characterization in CFRP parts</p> <p><u>Bernhard Reitingner</u></p>	<p>S4 - NDT of Composites OC240 - Nonlinear Guided Wave Damage Imaging in Composite Structures Using A Sparse Sensor Network</p> <p><u>Yusheng Ma</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC258 - Effect of Object Thickness on Resolution of TDI X-ray Detectors</p> <p><u>Anthony Dimalanta</u></p>	<p>S1 - Additive Manufacturing OC441 - Tomosynthesis for large additive manufacturing parts</p> <p><u>Anne-Françoise Obaton</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC254 - Improvement of radiographic images quality using algorithms dedicated to geometric blur reduction</p> <p><u>Nezha Mamouni</u></p>
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC55 - Assessment of metallurgical properties on moving steel strips at high temperature with laser ultrasonics</p> <p><u>Guillaume Cousin</u></p>	<p>S4 - NDT of Composites OC223 - 3D-characterization of carbon fibre reinforced polymers by Talbot-Lau grating interferometry radioscopy and computed tomography</p> <p><u>Johann Kastner</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC297 - PAUT and ToFD performance demonstration on HDPE joints</p> <p><u>Ludovic Pinier</u></p>	<p>S1 - Additive Manufacturing OC106 - Investigation of the Melting Process in the Hot End of a Fused Filament Fabrication 3D Printer by Means of X-Ray Computed Tomography</p> <p><u>Julian Ehrler</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC407 - Simulation of Eddy Current Rail Testing Data for Neural Networks</p> <p><u>Alexander Friedrich</u></p>
11:30 - 11:50	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC185 - Experimental analysis of planar/volumetric defects in ultrasonics NDT: Standardization of evaluation metrics using symbiosis of TOFD and TR-NEWS methods</p> <p><u>Serge Dos Santos</u></p>	<p>S4 - NDT of Composites OC401 - Inspection benchmarking of Fibre Reinforced Polymeric Composites produced by Additive Manufacturing</p> <p><u>Miguel A. Machado</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC383 - Material Characterisation of Polyamide using Fluidic Oscillator as a Frequency Modulated Air-Coupled Ultrasonic Transducer</p> <p><u>Viswa Ratnasri Sunkavalli</u></p>	<p>S1 - Additive Manufacturing OC166 - In-process Non-Destructive Evaluation of Wire + Arc Additive Manufacture Components Using Ultrasound High-Temperature Dry-Coupled Roller-Probe</p> <p><u>Rastislav Zimmermann</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC34 - Formulation of a Mechanical Stress Dependent Macroscopic Magnetic Model for Incremental Permeability Simulation</p> <p><u>Patrick Lombard</u></p>
11:50 - 12:10	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC344 - Robot-ready spot- and seam weld testing based on laser excitation and air-coupled detection of ultrasound</p> <p><u>Josef Pörnbacher</u></p>	<p>S4 - NDT of Composites OC54 - Multi-domain contactless NDI approach: Data fusion of structural light scanning with thermography and shearography</p> <p><u>Patrick Jansen</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC384 - Thermal stress opening of closed cracks with local cooling on the cracked surface</p> <p><u>Arthur Perrin</u></p>	<p>S2 - NDT Industry 4.0 OC83 - Monitoring Barkhausen noise measurements to detect and reduce grinding burn and case depth defects in manufactured parts</p> <p><u>Kizkitza Gurruchaga</u></p>	<p>S13 - Numerical Simulation, Modeling and Data Processing OC368 - A Physics-informed Neural Network for Pulsed Thermography-Based Defect Detection and Parameter Estimation</p> <p><u>Yuan Yao</u></p>

12:10 - 12:30	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC45 - Tensile properties estimation of aluminum alloys using deep learning-based ultrasonic testing <u>Kyung-young Jhang</u>	S4 - NDT of Composites OC284 - Automated woven background removal for enhanced infrared thermographic inspection of composites <u>Gaétan Poelman</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC389 - The importance of material guiding in the reliability of rotary UT testing of tubes - a practical approach to characterize testing equipment <u>Klaus Dickmann</u>	S2 - NDT Industry 4.0 OC146 - A Machine Learning Based-Guided Wave Approach for Damage Detection and Assessment in Composite Overwrapped Pressure Vessels <u>Amir Charmi</u>	S13 - Numerical Simulation, Modeling and Data Processing OC204 - Spatial resolution in photothermal and photoacoustic imaging <u>Peter Burgholzer</u>
12:30 - 12:50	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC380 - A study on the nonlinear correlation between viscoelasticity and guided ultrasound <u>Younho Cho</u>	S4 - NDT of Composites OC27 - Porosity in Carbon Fiber laminate part. Porosity coupons for the evaluation of the percentage voids volume. <u>Valter Capitani</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC409 - Modern corrosion mapping of storage tank bottoms – notable advancements in critical zone coverage, inspection efficiency and data integrity. <u>Andrew Simpson</u>	S2 - NDT Industry 4.0 OC190 - Laser ultrasonics for online monitoring of microstructures in the hot strip mill <u>Mikael Malmström</u>	S13 - Numerical Simulation, Modeling and Data Processing OC265 - A WebGPU-based acoustic wave simulator for ultrasound NDT <u>Thiago A. R. Passarin</u>
12:50 - 14:10	LUNCH				
14:10 - 14:30	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC346 - Self-calibrating SAFT algorithm for the inspection of electronic devices using scanning acoustic microscopy <u>Mario Wolf</u>	S4 - NDT of Composites OC56 - Computed tomography investigations of 3D aluminum - GMT hybrid profiles manufactured by compression molding <u>Manel Ellouz</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC414 - Quantitative analysis of delaminations by means of lock-in infrared thermography <u>Javier Rodriguez-Aseguinolaza</u>	S2 - NDT Industry 4.0 OC195 - Using DICONDE for NDT Data Fusion <u>Geo Jacob</u>	S13 - Numerical Simulation, Modeling and Data Processing OC263 - Using Perfectly Matched Layer in a GPU simulation of ultrasound NDT <u>Thiago A. R. Passarin</u>
14:30 - 14:50	S19 - Biomedical Technology OC85 - Modelling of an ultrasound-based system for cataract detection and classification <u>Mário Santos</u>	S4 - NDT of Composites OC243 - Defect-aware Super-resolution Thermography by Adversarial Learning <u>Cheng Liangliang</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC88 - Mimicking dam upstream slope scenarios in acrylic tanks for ultrasonic evaluation <u>Tiago Dourado</u>	S2 - NDT Industry 4.0 OC92 - Reduction of rejects by combining data from the casting process and automatic X-ray inspection <u>Thomas Stocker</u>	S13 - Numerical Simulation, Modeling and Data Processing OC293 - Determining ultrasonic propagation effective properties in complex heterogeneous media through microstructure-scale simulation <u>Vincent Dorval</u>
14:50 - 15:10	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager <u>Michael Kaack</u>	S4 - NDT of Composites OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures <u>Wolfgang Holub</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores <u>Tiago Dourado</u>	S2 - NDT Industry 4.0 OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor <u>Fanfu Wu</u>	S13 - Numerical Simulation, Modeling and Data Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure predicted by Cellular Automaton method <u>Shan Lin</u>
15:10 - 15:30	S9 - Guided Waves OC342 - A study on the wave propagation on weld joints by the use of feature-guided wave mixing <u>Jaesun Lee</u>	S4 - NDT of Composites OC361 - X-ray Computed Tomography Inspection of Novel Ceramic Matrix Composites <u>Nick Brierley</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC241 - Self-sensing metallic material based on piezoelectric particles <u>Pedro Ferreira</u>	S2 - NDT Industry 4.0 OC1 - On the use of inline phase transformation sensors in a hot strip mill: a case study <u>Haibing Yang</u>	S13 - Numerical Simulation, Modeling and Data Processing OC8 - 3D HYBRID MODELING FOR THE ULTRASONIC PHASED ARRAY INSPECTION OF POROSITY IN HEAVY PLATES: SIMULATION AND EXPERIMENTAL VALIDATION <u>Sanjeevareddy Kokoori</u>
15:30 - 15:50	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC437 - IN-SERVICE OIL REFINERIES STORAGE TANK INSPECTION WITH GUIDED WAVES. <u>Levente Bazsanyi</u>	S4 - NDT of Composites OC39 - NDT & METROLOGY – Improving Efficiency in Aerospace Manufacturing utilizing the Multi-Modality Approach <u>Thomas Gramberger</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC12 - Working Smart Using Wireless UT Sensors for Asset Integrity Monitoring <u>Steve Strachan</u>	S2 - NDT Industry 4.0 OC19 - HIGH TEMPERATURE CHARACTERISATION OF THE STIFFNESS MATRIX OF DIFFERENT STEELS <u>Arno Volker</u>	S9 - Guided Waves OC234 - Excitation and reception of higher order guided Lamb waves in sheet type composite structures using phased air-coupled ultrasonic arrays <u>Justina Sestoke</u>
15:50 - 16:10	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC253 - Detection of barely visible impact damage in composite plates using non-linear pump-probe technique <u>Guillemette Ribay</u>	S4 - NDT of Composites OC288 - Developing in-line inductive probes for carbon fibre composite manufacturing <u>Robert Hughes</u>	#N/D	#N/D	S13 - Numerical Simulation, Modeling and Data Processing OC225 - Comparison of grain structure models for wave propagation analysis in centrifugally cast stainless steel <u>Masaki Nagai</u>
16:10 - 16:40	COFFEE-BREAK				

16:40 - 17:00	S9 - Guided Waves OC371 - Deep learning algorithms for design of periodic structures and dispersion curves calculation <u>Kseniia Barashok</u>	S6 - Microwave, Terahertz, and Infrared OC73 - Non-destructive testing of fiber-reinforced composites by terahertz method <u>Waldemar Swiderski</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC123 - Identification of overloads on splined shafts by means of eddy current testing technology <u>René Gansel</u>	S2 - NDT Industry 4.0 OC111 - Automated Spot Weld Testing using a Smart Robotic System <u>York Oberdoerfer</u>	S13 - Numerical Simulation, Modeling and Data Processing OC298 - AI-based and model assisted diagnostic for ultrasonic TFM weld inspection <u>Stéphane Le Berre</u>
17:00 - 17:20	S9 - Guided Waves OC214 - Guided Wave-based Structural Health Monitoring for a Composite Aircraft Fuselage under Mechanical Load <u>Maria Moix-Bonet</u>	S6 - Microwave, Terahertz, and Infrared OC108 - Improvement of 3D-Active Thermography by using Artificial Intelligence <u>Marc Kreutzbruck</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC66 - A low-cost ultrasonic array for long-term and high-resolution localised monitoring <u>Xiaoyu Sun</u>	S2 - NDT Industry 4.0 OC215 - Easy to go and innovative validation process using the spot weld inspection system PHAsis and related software <u>Philipp Poltersdorf</u>	S13 - Numerical Simulation, Modeling and Data Processing OC338 - Automated honeycomb detection during Impact Echo inspections using AI trained by simulation data <u>Fabian Dethof</u>
17:20 - 17:40	S9 - Guided Waves OC306 - Passive guided wave tomography for monitoring corrosion in pipes <u>Arnaud Recoquillay</u>	S6 - Microwave, Terahertz, and Infrared OC207 - Combing radar and ultrasound imaging for surface echo compensation and augmented visibility of interior structures in NDT applications <u>Ingrid Ullmann</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC101 - Experimental evidence of spin electron magnetic moment vibration activated with the magnetic field and monitored by acoustic emission <u>Giuseppe Nardoni</u>	S2 - NDT Industry 4.0 OC348 - FebUS - Development and application of the latest technologies in the UT-NDT field <u>Damiano Sallemi</u>	S13 - Numerical Simulation, Modeling and Data Processing OC450 - THICKNESS MEASUREMENT FOR METALLIC LAMINATES: AN ACCURATE METHOD FOR INDUSTRIAL APPLICATIONS <u>Antonello Tamburrino</u>
17:40 - 18:00	S9 - Guided Waves OC328 - 24/7 Large Area Corrosion Monitoring <u>Thomas Voght</u>	S6 - Microwave, Terahertz, and Infrared OC41 - Some practical NDE and QC Applications of Time Domain Terahertz Technology <u>Joe Buckley</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC126 - Infrared Thermography testing during the welding process <u>Sébastien Saint Yves</u>	S2 - NDT Industry 4.0 OC370 - Knowledge sharing as a central idea of NDT 4.0 <u>Tamara Diederichs</u>	S13 - Numerical Simulation, Modeling and Data Processing OC97 - Custom Transient Finite Element Method and Ray Tracing Hybridization Strategies for Ultrasonic Testing Modelling <u>Edouard Demaldent</u>
18:00 - 18:20	S9 - Guided Waves OC327 - Detection and Measurement of Pitting Corrosion using Short Range Guided Wave Scanning <u>Sam Horne</u>	S6 - Microwave, Terahertz, and Infrared OC25 - Field Applications for Multi-Frequency Microwave Imaging <u>Terry Haigler</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC147 - Quantitative visual vibrometry for defect detection. <u>Lucy Dougill</u>	S2 - NDT Industry 4.0 OC188 - NDE 4.0 Roadmap for Ultrasonic Nonlinear Imaging within Industry 4.0: the importance of prescriptive Signal, Image and Data Analysis <u>Serge Dos Santos</u>	S4 - NDT of Composites OC377 - Modelling low-frequency vibration response and defect detection in homogeneous solids and honeycomb composite panels <u>Joshua Aigbotsua</u>

DAY 3 - WEDNESDAY, 5 JULY 2023

05-Jul-23 TIME	SESSION AUDITORIUM 2	AUDITORIUM 3	AUDITORIUM 6	AUDITORIUM 8	ROOM 1.08
09:00 - 09:20	S13 - Numerical Simulation, Modeling and Data Processing OC157 - A generic numerical solver for modeling the influence of stress conditions on guided wave propagation for SHM applications <u>André Dalmora</u>	S25 - ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC231 - Vibrational NDT with Under-sampled Data through Physics-informed Neural Networks <u>Saeid Hedayatrasa</u>	S2 - NDT Industry 4.0 OC140 - Platform for ultrasonic data management and evaluation <u>Iratxe Aizpurua</u>	S18 - Oil & Gas OC62 - Development of HOIS guidance for ultrasonic NDT for non-intrusive inspection at elevated temperatures <u>Helen Peramatzis</u>
09:20 - 09:40	S9 - Guided Waves OC436 - Lamb Wave Mode Conversion Analysis for Crack Assessment <u>Artur Ribeiro</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC247 - Sensitivity study of tuned Lamb wave excitation with an embedded Lead Zirconate Titanate transducer in composite laminates <u>Nina Kergosien</u>	S2 - NDT Industry 4.0 OC171 - Automated adaptive TFM method for gas turbine testing in NDE 4.0 <u>Christian Hassenstein</u>	S18 - Oil & Gas OC110 - Field inspection of steel pipes using automatic UT <u>Raphaël Michel</u>
09:40 - 10:00	S9 - Guided Waves OC177 - Influence of Environmental and Operational Variation on Reliability Assessment of Guided Wave-based Structure Health Monitoring System on a Pipeline Structure <u>Ahmed Bayoumi</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC280 - Damage Monitoring of Buried Pipelines under Harsh Noise Environment using Low Frequency Acoustic Emission Analysis <u>Sun-Ho Lee</u>	S2 - NDT Industry 4.0 OC335 - Transforming Ultrasonic Inspection Data Management through Cloud-Based Solutions <u>André Lamarre</u>	S18 - Oil & Gas OC124 - Ultrasonic inspection of "shaped pipes" <u>Fabien Lefevre</u>

10:00 - 10:20	S9 - Guided Waves OC275 - A Realistic 'digital twin' for guided wave SHM of pipelines <u>Panpan Xu</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC448 - SHM of wire- breakage in concrete bridges by Acoustic Emission Technique <u>Horst Trattnig</u>	S2 - NDT Industry 4.0 OC35 - Production Integrated CT Inspection Process <u>Alexander Suppes</u>	S18 - Oil & Gas OC264 - Virtual encoder: a two-dimension visual odometer for NDT <u>Thiago A. R. Passarin</u>
10:20 - 10:40	S9 - Guided Waves OC334 - Development of a digital twin for generating realistic ultrasonic guided wave signals <u>Vivek Nerlikar</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC416 - Automatized Scaling Monitoring in Pipelines with Acoustic Resonance Testing <u>Isabelle Stüwe</u>	S2 - NDT Industry 4.0 OC175 - Magneto-Optic Screening Technology for Integrity Monitoring of Pipelines <u>Gabriel Dinis</u>	S18 - Oil & Gas OC356 - Detection and Characterisation of Hydrogen-Induced Cracking using ultrasonic NDT inspection techniques <u>Peter Merck</u>
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	S9 - Guided Waves OC17 - Impact localization in composite structures with guided wave and 1D convolutional neural network <u>Bo Feng</u>	S25 - ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC226 - Frequency Steerable Acoustic Transducers for Guided Waves-based Structural Health Monitoring <u>Masoud Mohammadgholiha</u>	S2 - NDT Industry 4.0 OC134 - Numerical study of the Line Scan InfraRed Thermography (LST-IR) to optimize the inspection of aircraft structures <u>Ludovic Gaverina</u>	S18 - Oil & Gas OC255 - Evaluation and Simulation of HTHA Damaged Specimen using UT Advanced Techniques <u>Bastien Clausse</u>
11:30 - 11:50	S9 - Guided Waves OC154 - Guided waves defect interaction coefficients obtained through image-based models <u>Daniel Lozano</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC206 - Acoustic non-destructive testing of UAV's propellers during predeparture and post-flight checks <u>Maria Soria Gomez</u>	S2 - NDT Industry 4.0 OC283 - Automatic defect detection in fiber-reinforced polymer matrix composites using thermographic vision data <u>Nuno Mendes</u>	S18 - Oil & Gas OC369 - Phased Array Ultrasonic Testing for Inspection of LNG Storage Tank <u>Soonho Won</u>
11:50 - 12:10	S9 - Guided Waves OC159 - On the development of a model-assisted design procedure of guided wave-based SHM systems <u>Enes Savli</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC415 - An Acoustic Emission IoT Device for Wind Turbine Rotor Blade Condition Monitoring <u>Valery Godinez-Azcuaga</u>	S2 - NDT Industry 4.0 OC181 - Applications of Deep Learning in NDE <u>Ryan Scott</u>	S18 - Oil & Gas OC202 - Latest Developments in the Hardspot Inspection of heavy plates <u>Gerald Schneibel</u>
12:10 - 12:30	S13 - Numerical Simulation, Modeling and Data Processing OC435 - Detection of flaws in austenitic stainless steel plate using eddy current testing <u>Helena Ramos</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC174 - NDE & Sensing Solutions for Pipeline Structural Health Monitoring <u>Bruno Moreira</u>	S2 - NDT Industry 4.0 OC396 - Automatic defect recognition on parts after MPI and FPI <u>Radek Salac</u>	S18 - Oil & Gas OC438 - Low-cost tool for identifying illegal tapping used for fuel theft <u>Lucas Braga Campos</u>
12:30 - 12:50	S13 - Numerical Simulation, Modeling and Data Processing OC434 - Leveraging Signal Correlation for a Multi-variable Model Assisted PoD of Flaws in Eddy Current NDT <u>Artur Ribeiro</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC294 - Guided waves based SHM system for rail monitoring and its environmental impact <u>Bastien Chapuis</u>	S2 - NDT Industry 4.0 OC184 - An analysis of how a software platform can achieve complete digital transformation using Radiographic Testing as an example <u>Lea Köhler</u>	S18 - Oil & Gas OC440 - Development of Non-destructive Testing Method for Tube Inspection in Fin-Fan Coolers in Kazakhstan's Oil/Gas, Chemical and Power Industries. <u>John Hansen</u>
12:50 - 14:10	LUNCH				
14:10 - 14:30	S9 - Guided Waves OC158 - Addressing non-uniqueness for the tomographic reconstruction of wall thickness loss in pipelines. <u>Emiel Hassefras</u>	S25 - ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC299 - 24/7 monitoring on metallic pressure equipment, storage tanks and infrastructure components with acoustic emission <u>Gerald Lackner</u>	S2 - NDT Industry 4.0 OC303 - Strategy for NDTE education at universities in France <u>Serge Dos Santos</u>	S11 - Art & Cultural Heritage OC20 - Ten+ Years of Experience in Digitization of Cultural Heritage by Means of Industrial X-ray Computed Tomography: A Summary <u>Theobald Fuchs</u>
14:30 - 14:50	S9 - Guided Waves OC193 - Numerical Assessment of Guided Wave Tomography in a Pipe Bend Based on Full Waveform Inversion <u>Carlos Omar Rasgado Moreno</u>		S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC410 - CORROSION BASED DEFECT DETECTION AND CLASIFICACION IN PIPE WALL USING MULTIPLE HIGH ORDER ULTRASONIC GUIDED WAVE MODES <u>Donatas Cirtautas</u>	S2 - NDT Industry 4.0 OC287 - Advanced machine learning for dissimilar metal weld phased array ultrasonic inspection <u>Tuomas Koskinen</u>	S11 - Art & Cultural Heritage OC87 - Non-Destructive Examination of Metallic Idols and Statues in Religious Institutions - A Case Study <u>Tejas Ingale</u>

14:50 - 15:10	S9 - Guided Waves OC208 - Enhancement and comparison of tomographic reconstruction images in plate-like structures of aircrafts for SHM application using guided waves <u>Aadhik Asokkumar</u>		#N/D	S2 - NDT Industry 4.0 OC192 - NDE 4.0 – Digital Transformation of NDE <u>Lennart Schulenburg</u>	S11 - Art & Cultural Heritage OC429 - Non-Destructive Testing of Artworks from the Artist Cy Twombly <u>Juliana Berthold</u>
15:10 - 15:30	S9 - Guided Waves OC249 - Damage imaging and wavenumber mapping for inspection of bonded CFRP plates using ultrasonic guided waves <u>Mohsen Barzegar</u>		S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC28 - Reliable detection of stick welds at resistance spot welding <u>Christian Mathiszik</u>	S2 - NDT Industry 4.0 OC364 - Unified NDT Inspection Software platform to the service of NDE community <u>Patrick Huot</u>	S11 - Art & Cultural Heritage OC300 - Active thermography to look beneath the surface of a historic German aircraft <u>Julia Frisch</u>
15:30 - 15:50	S9 - Guided Waves OC286 - Inspection of CFRP Aircraft Components using Guided Wavefield Imaging in Wavenumber-Frequency domain <u>Mathias Kersemans</u>		S14 -Transportation (Railway, Automotive, Marin, Aerospace) OC292 - Adaptive ultrasonic rail wheel testing system with advanced phased array technology <u>Thomas Würschig</u>	S2 - NDT Industry 4.0 OC394 - Magnetic crawler for welds Visual Testing, based on 3D profilometry and 2D image processing <u>Marco Induti</u>	S11 - Art & Cultural Heritage OC222 - Virtual reconstruction of some metal artifacts discovered at the Roman auxiliary fort of Cumidava using combined X-ray microtomography and microfluorescence <u>Ion Tiseanu</u>
15:50 - 16:10	S9 - Guided Waves OC343 - The use of segmented Magneto-strictive tools for Medium Range Ultrasonic Inspection of pipelines <u>Andrew Simpson</u>		S14 -Transportation (Railway, Automotive, Marin, Aerospace) OC72 - Innovative concept enables higher sensitivities in ultrasonic testing of railroad wheels <u>Andreas Knam</u>	#N/D	S11 - Art & Cultural Heritage OC312 - Laminographic Imaging of a Medieval Panel Painting by RoboCT <u>Wolfgang Holub</u>
16:10 - 16:40	COFFEE-BREAK				
16:40 - 17:00	S9 - Guided Waves OC183 - Modelling guided wave reflection from defects in pipes - an integrated approach <u>Abdul Mateen Qadri</u>	S25 - ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	S14 -Transportation (Railway, Automotive, Marin, Aerospace) OC203 - Advanced 3D-TFM Ultrasonic Spot-Weld Inspection <u>Tobias Bruch</u>	S2 - NDT Industry 4.0 OC395 - The AutosonicTM, a system for the full automatic inspection of seamless steel and aluminum gas cylinders industry 4.0 ready. <u>Luca Scaccabarozzi</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC 317 - OLED Glass Substrates Inspection using Air-coupled Ultrasonic Testing <u>Bonggyu Ji</u>
17:00 - 17:20	S9 - Guided Waves OC235 - Data-Driven Remaining Useful Life Prognostic for Aeronautical Composite Structures based on Guided Waves <u>Ferda Cansu GÜL</u>		S14 -Transportation (Railway, Automotive, Marin, Aerospace) OC229 - Assessment of residual stresses in railway rails using ultrasonic and Barkhausen noise techniques <u>Young-In Hwang</u>	S2 - NDT Industry 4.0 OC431 - Data processing to analyze health state in X-ray modules <u>Pascal Corbat</u>	#N/D
17:20 - 17:40	#N/D	#N/D	#N/D	#N/D	#N/D
17:40 - 18:00	x	x	x	x	x
17:40 - 18:00	x	x	x	x	x
19:30	GALA DINNER				

DAY 3 - WEDNESDAY, 5 JULY 2023 / ACADEMIA INTERNATIONAL RESEARCH DAY (AIRD)

05-Jul-23 TIME	AUDITORIUM 2	AUDITORIUM 3	AUDITORIUM 6	AUDITORIUM 8	ROOM 1.08
09:00	x	S25 - Academia International Research Day (AIRD) FRONTIERS IN NDT	x	x	x
09:00 - 09:10	x	Opening and Welcome <u>Peter Trampus</u> President of Academia NDT International, Hungary	x	x	x
09:10 - 09:50	x	NDE and Deep Learning: Fashion Trend or the Future? <u>Keynote Presentation - Roman Gr. Maev</u> University of Windsor, Canada	x	x	x

09:50 - 10:20	x	The perspective of Academia NDT International <u>Peter Trampus</u> President of Academia NDT International, Hungary	x	x	x
10:20 - 10:40	x	Experimental evidence of the spin magnetic moment of electron activated by the magnetic field and monitored by acoustic emission <u>Giuseppe Nardoni, N. Fallahi, P. Nardoni</u> I&T Nardoni Institute, Italy	x	x	x
10:40 - 11:10	COFFEE-BREAK				
11:10	x	INTERNATIONAL FORUM ON NDT EDUCATION AT UNIVERSITIES Joint meeting of Academia NDT International and ICNDT WG 3	x	x	x
11:10 - 11:20	x	Opening and Welcome <u>Younho Cho</u> President of WCNDT 2020 and Chairman of WG 3 of ICNDT, South Korea	x	x	x
11:20 - 11:50	x	NDT Integrity Engineering – The Feasible Curriculum <u>Keynote presentation - Peter Trampus 1, Vjera Krstelj 2</u> 1 President of Academia NDT International, Hungary 2 President of Croatian Engineering Association, Croatia	x	x	x
11:50 - 12:10	x	Current Status and Challenges of NDE Education at Academic Institutions in the U.S.A. <u>Reza Zoughi</u> Center for Nondestructive Evaluation (CNDE), IOWA State University, U.S.A.	x	x	x
12:10 - 12:30	x	The UK Research Centre for NDE (RCNDE) – Twenty Years of Delivering Value to Industry <u>Colin Brett</u> RCNDE, United Kingdom	x	x	x
12:30 - 12:50	x	General Education and Training of NDT Personnel, including NDT Education at Universities in South Africa <u>Manfred Johannes</u> Immediate Past President of SAINT, South Africa	x	x	x
12:50 - 14:10	LUNCH				
14:10 - 14:30	x	S25 - Academia International Research Day (AIRD) Experience with an International NDT Master Course in view of Research and Development <u>Uwe Ewert 1, Viktor Lyamkin 2, Christian Boller 1, 3</u> 1 Dresden International University (DIU), Dresden, Germany 2 NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany 3 NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany	x	x	x

14:30 - 14:50	x	Strategy for NDTE Education at Universities in France Philippe Duvauchelle 1, Rachid El-Gueriouma 2, Serge Dos Santos 3 1 NDT specialized master, INSA, France 2 Mechanical Engineering and Acoustic, Le Mans University, France 3 INSA Centre Val de Loire, France	x	x	x
14:50 - 15:10	x	The Role of ASNT in Supporting NDT Education and Research in the USA Shant Kenderian The Aerospace Corporation, ASNT Engineering Council, U.S.A.	x	x	x
15:10 - 15:30	x	Strategy for NDT Education at Universities in India Krishnan Balasubramaniam IIT, India	x	x	x
15:30 - 15:50	x	Development and Practical Exploration of NDT Education at Universities in China Yongshun Xiao Tsinghua University, China	x	x	x
15:50 - 16:10	x	Strategy for NDE Education at Universities in UK: An Integrated Education Programme for NDT Professionals David Gilbert BINDT, United Kingdom	x	x	x
16:10 - 16:40	COFFEE-BREAK				
16:40 - 17:10	x	Panel Discussion Shant Kenderian, Younho Cho, Peter Trampus Academia NDT International, WG3 ICNDT	x	x	x
17:10 - 17:20	x	x	x	x	x
17:20 - 17:40	x	x	x	x	x
17:40 - 18:00	x	x	x	x	x
17:40 - 18:00	x	x	x	x	x
19:30	GALA DINNER				

DAY 4 - THURSDAY, 6 JULY 2023

06-Jul-23 TIME	SESSION AUDITORIUM 2	AUDITORIUM 3	AUDITORIUM 6	AUDITORIUM 8	ROOM 1.08
09:00 - 09:20	S9 - Guided Waves OC270 - Use of periodic structures for mode transformation in cylindrical objects <u>I Boris</u>	S5 - Materials Characterization OC3 - HIGH TEMPERATURE MAGNETIC PROPERTIES OF SELECTED STEEL GRADES <u>John Wilson</u>	S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC250 - In-Service Ultrasonic Wheel Inspection thought beyond - New Generation with Focus on improved Ergonomics, Digitalization and Operator Support <u>Thomas Würschig</u>	S2 - NDT Industry 4.0 OC120 - A path towards digital industry: Airblade grains detection by directional reflectance technique <u>Clément Remacha</u>	S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC245 - Development and adaptation of Ultrasonic system for Windblades inspection using Unmanned Aerial Vehicles <u>Sergio González</u>
09:20 - 09:40	S9 - Guided Waves OC315 - APPLICATIONS OF LINEAR SCANNING MAGNETOSTRICTIVE TRANSDUCERS (MST) FOR FINDING OF HARD TO DETECT ANOMALIES IN STRUCTURAL COMPONENTS <u>Sergey Vinogradov</u>	S5 - Materials Characterization OC105 - Non-destructive magnetic evaluation of microstructure and mechanical properties of advanced high-strength steels <u>Ane Martinez-de-Guerenu</u>	S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC82 - Scanning pulse phase thermography for surface defect detection in manganese steel turnout frogs <u>Christoph Tuschl</u>	S2 - NDT Industry 4.0 OC53 - Automating 'Image-Based Simulation' with machine learning for virtual quality assurance in industrial applications <u>Llion Evans</u>	S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC79 - Automated analysis of Baffle Bolts <u>Javier De La Morena</u>

09:40 - 10:00	S8 - Ultrasound Phased Arrays OC49 - The effect of ultrasound wave path estimation to defect characterization capability in half-skip total focusing method <u>Håkan Wirdelius</u>	S5 - Materials Characterization OC132 - Heat treatment and residual stress characterization by electromagnetic non-destructive methods <u>Hélène Petitpré</u>	S14 - Transportation (Railway, Automotive, Marine, Aerospace) OC419 - Experimental evaluation of metallic ropes magnetisation under magneto-inductive testing <u>Aldo Canova</u>	S2 - NDT Industry 4.0 OC129 - Guided wave ultrasonic feature determination in Type IV composite overwrapped pressure vessels towards the digital twin <u>Bengisu Yilmaz</u>	S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC24 - Power Plant Condition Assessment through Engineering, Materials Science, and NDT 4.0 <u>Terry Haigler</u>
10:00 - 10:20	S8 - Ultrasound Phased Arrays OC63 - Development of 1024-elements 2D matrix array transducer for high-resolution 3D phased-array imaging in NDE applications <u>Yoshikazu Ohara</u>	S5 - Materials Characterization OC161 - Magnetic NDT of the Microstructure of Steels for Oil and Gas Applications <u>Alasdair Regan</u>	S14 - Transportation (Railway, Automotive, Marine, Aerospace) OC350 - How to Reach 100% Inspection Coverage of Aeroengine Fan Blades with a High Probability of Detection <u>Etienne Grondin</u>	S3 - Robotics and Automation OC169 - Strategies for pipeline inspection using mobile robots <u>Jie Zhang</u>	S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC282 - Eddy current response from copper tube extrusion laps compared to artificial notches <u>Barend Van Den Bos</u>
10:20 - 10:40	S8 - Ultrasound Phased Arrays OC251 - Innovative Instrument Platforms for Ultrasonic Inspections <u>Johannes Buechler</u>	S5 - Materials Characterization OC172 - Advances in Automated Eddy-Current Characterisation of Carbon Fibre Composites <u>Qiuji Yi</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC29 - Inspection of vaporizers and recuperators in Binary Cycle Geo Thermal Power plant <u>Vignesh Sivanandam</u>	S3 - Robotics and Automation OC413 - DEKRA Robotized Inspection of Hazardous Areas <u>Oliver London</u>	S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC329 - Investigation on Potential Benefits of Phase Coherence Imaging in Detection and Sizing of Stress Corrosion Cracking in Austenitic Materials Used in the Nuclear Industry <u>Florin Turcu</u>
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	S8 - Ultrasound Phased Arrays OC267 - Assessing the roughness of surfaces with ultrasound arrays <u>Thiago A. R. Passarin</u>	S5 - Materials Characterization OC385 - Can Martensitic Phase Transformation Measured by Magnetic Methods be an Indicator of Fatigue Damage in Austenitic Steel at Elevated Temperature and Thermo-Mechanical Loading? <u>Viktor Lyamkin</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC23 - Process safe automatic evaluation for fast Inline-CT systems <u>Tobias Schön</u>	S3 - Robotics and Automation OC7 - Quantitative Measurement and Evaluation of High-Resolution Ultrasonic Sound Fields using a Novel Automated Ultrasonic Immersion Scanner <u>Sanjeevareddy Kokoori</u>	S18 - Oil & Gas OC296 - Performance demonstration of AUT Pipeline girth welds using simulation and the new CIVA AUT Pipeline software <u>Stéphane Le Berre</u>
11:30 - 11:50	S8 - Ultrasound Phased Arrays OC43 - Low Frequency GFRP Imaging with Variable Aperture TFM <u>Renato Nogueira</u>	S5 - Materials Characterization OC402 - Microchannels produced by Friction Stir Channeling: characterisation with non-destructive testing techniques <u>Miguel A. Machado</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC33 - Unsupervised deep learning for defect detection on CT parts using simulated data <u>Virginia Florian</u>	S3 - Robotics and Automation OC114 - Innovations in ultrasonic inspection of forged rings <u>Tobias Gautzsch</u>	S18 - Oil & Gas OC330 - Reducing False Calls in HTHA Inspection through Phase Coherence Imaging (PCI) <u>Florin Turcu</u>
11:50 - 12:10	S8 - Ultrasound Phased Arrays OC390 - Total Focusing Method (TFM) and Phase Coherence Imaging (PCI) applied to various industrial cases <u>Paul Hillman</u>	S5 - Materials Characterization OC125 - Reliable non-destructive detection and characterization of material degradation caused by high-temperature corrosion <u>Sebastian Barton</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC64 - Optimization of Computed Tomography Data Acquisition by Means of Quantum Computing <u>Theobald Fuchs</u>	S3 - Robotics and Automation OC135 - AUTOMATED MULTI-NDT METHOD <u>Jules Recolin</u>	S18 - Oil & Gas OC191 - Applying Artificial Intelligence (AI) in Digital Radiography <u>Lennart Schulenburg</u>
12:10 - 12:30	S8 - Ultrasound Phased Arrays OC398 - Total Focusing (TFM) for the Ultrasonic Testing (UT) of drawn arc stud welding <u>Carlo Romito</u>	S5 - Materials Characterization OC461 - Visualization of stresses, properties and defects in steel components by means of intelligent magneto-optical sensor technology <u>Lukas Lauck</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC22 - Automatic scan planning for CT scans <u>Frank Sukowski</u>	S3 - Robotics and Automation OC227 - Autonomous Ultrasonic Disc inspection System <u>Michael Bron</u>	S18 - Oil & Gas OC261 - A data-driven method for the correction of optical distortions of depth cameras in immersion NDT <u>Thiago A. R. Passarin</u>
12:30 - 12:50	S8 - Ultrasound Phased Arrays OC432 - New Real-Time TFM in 1 shot <u>Christophe Chollet</u>	S5 - Materials Characterization OC162 - Non-Destructive Determination of the Magnetic Properties of Ferritic Steel Strip and Plate Products by Open-Circuit Magnetic Measurement <u>Alasdair Regan</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC362 - Merged Mode TFM with Mode Conversion Artifact Suppression <u>Patrick Huot</u>	S3 - Robotics and Automation OC360 - The use of Robotic Solutions for inspection of Unpiggable Pipelines <u>Michel Bezemer</u>	#N/D
12:50 - 14:10	LUNCH				
14:10 - 14:30	S8 - Ultrasound Phased Arrays OC4 - Development and Validation Testing of High-Temperature Phased-Array UT Transducers and Wedges for Process Applications <u>Steve Strachan</u>	S5 - Materials Characterization OC75 - Estimation of the stiffness tensor from Lamb wave velocity profiles measured on steel with different texture <u>Arno Volker</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC100 - Innovative NDT Technique, for a More Productive Surface Damage Inspection <u>Francois Lachance</u>	S3 - Robotics and Automation OC378 - A Freely Positionable Dual-Robot System for Automated NDT of Large Lightweight Structures <u>Marc Kreutzbruck</u>	#N/D

14:30 - 14:50	S8 - Ultrasound Phased Arrays OC220 - Temperature and geometry impact on defect detection and sizing <u>Pavel Mares</u>	S5 - Materials Characterization OC238 - Orthotropic stiffness characterization using guided wavefield data and machine learning <u>Adil Han Orta</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC131 - Novel concepts for automatic inspection of railway tracks <u>Stephan Falter</u>	S3 - Robotics and Automation OC10 - Nuclear RPV inspection with multiple ROV:s for shorter inspection time <u>Peter Merck</u>	#N/D
14:50 - 15:10	S8 - Ultrasound Phased Arrays OC269 - Ultrasonic sectorial inspection in the presence of temperature gradients <u>Thiago A. R. Passarin</u>	S5 - Materials Characterization OC374 - Study of the crystallization behaviour of phase change materials by in-situ X-ray computed tomography <u>Jorge Martinez Garcia</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC291 - Thermographic detection of internal defects using photothermal super resolution reconstruction and 2D-structured illumination patterns <u>Julien Lecompaon</u>	S3 - Robotics and Automation OC139 - Novel automatic inspections <u>Jose Luis Lanzagorta</u>	#N/D
15:10 - 15:30	S8 - Ultrasound Phased Arrays OC351 - Ultra-Fast Wall Remaining Thickness Measurements & Reporting <u>Guillaume Ithurralde</u>	S5 - Materials Characterization OC299 - Layer thickness measurement of ceramic systems with a numerical model for flash thermography <u>Julia Frisch</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC278 - Visual color inspection with a hyperspectral camera: inline application for automotive parts production <u>Eduardo Assunção</u>	S3 - Robotics and Automation OC366 - Automatic Methods for Ultrasonic Scanning Paths Generation <u>Michel Brassard</u>	#N/D
15:30 - 15:50	S8 - Ultrasound Phased Arrays OC170 - In-process Monitoring and Control of Multi-Pass Fusion Welding Using Phased Arrays <u>Nina Sweeney</u>	S5 - Materials Characterization OC144 - Deep Learning Approach for Multi-Class Segmentation in Industrial CT-Data <u>Tim Schanz</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC46 - AI-based non-destructive weld seam testing in the field of passive thermography <u>Patrick Kammel</u>	S3 - Robotics and Automation OC290 - Automated misalignment correction method for ultrasonic inspection of CFRP parts <u>Alexandre Beausoleil</u>	#N/D
15:50 - 16:10	S8 - Ultrasound Phased Arrays OC218 - Detection of defects initiation in weld joints <u>Pavel Mares</u>	S5 - Materials Characterization OC145 - Generative Synthesis of Defects in Industrial Computed Tomography Data <u>Robin Tenschler-Philipp</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC213 - Artificial Intelligence for Assisted Analysis of Eddy Current Data from Heat Exchangers with Non-Ferromagnetic Tubes <u>Marco Michele Sisto</u>	S3 - Robotics and Automation OC219 - High-speed, multi-zone ultrasonic inspection of bar and wire stocks with an in-line phased array inspection system <u>Thomas Würschig</u>	#N/D
16:10 - 16:40	COFFEE-BREAK				
16:40 - 17:00	S8 - Ultrasound Phased Arrays OC359 - On the Use of Asymmetrical DMA Probe Assemblies for PA UT Inspection of Tapered Dissimilar Metal Weld Configurations <u>Paul Hillman</u>	S21 - Food & Agriculture OC363 - Monitoring of water distribution in meat upon freezing with X-ray computed tomography <u>Philipp Schütz</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC65 - Digital radiography by counting photons: innovative solution for testing very thick parts <u>Angela Peterzol</u>	S24 - Qualification, certification, standards and training OC325 - Standard development for Eddy Current Arrays in lieu of Magnetic Particle Testing <u>Casper Wassink</u>	
17:00 - 17:20	S8 - Ultrasound Phased Arrays OC372 - A High-Speed Ultrasound Full-Matrix Capture Acquisition System for Robotic Weld Inspection <u>Marcin Lewandowski</u>	S5 - Materials Characterization OC276 - High-resolution imaging of magnesium feedstock material for Wire Arc Additive Manufacturing (WAAM) <u>Sascha Senck</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC353 - Sub-second X-ray tomography using MetalJet X-ray sources <u>Emil Espes</u>	S24 - Qualification, certification, standards and training OC189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u>	
17:20 - 17:40	S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification of ultrasound phased array systems <u>Benoit Dupont</u>	S5 - Materials Characterization OC80 - Monitoring crack tip position in Cracked Lap Shear specimens subjected to fatigue loading <u>Michele Carboni</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC449 - ELECTRICAL CONDUCTIVITY AND THICKNESS ESTIMATION BASED ON DIMENSION ANALYSIS IN EDDY CURRENT TESTING <u>Antonello Tamburrino</u>	S24 - Qualification, certification, standards and training OC418 - The conversion from film to digital and the revision of ISO 17636-2, weld testing, with digital radiography <u>Uwe Zscherpel</u>	
17:40 - 18:00	S8 - Ultrasound Phased Arrays OC442 - Robot-based spot weld inspection - almost couplant-free, imaging phased array based inspection with PHAsis, integrated and automated by ABB Robotics <u>Carsten Köhler</u>	S5 - Materials Characterization OC37 - INFLUENCE OF BIAxIAL STRESS ON MAGNETIC BEHAVIOR OF HOT- ROLLED STEELS <u>Olivier Hubert</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC289 - Resonant Inductive Arrays for Non-Destructive Testing Applications <u>Robert Hughes</u>	S24 - Qualification, certification, standards and training OC52 - Enhancing the NDE training at the light of the new technologies and market demands <u>Rafael Martínez-Oña</u>	

18:00 - 18:20	S8 - Ultrasound Phased Arrays OC68 - Inspection for non-planar shaped welded joints of pipes using FMC ultrasonic technique <u>Sho Yamaguchi</u>	S9 - Guided Waves OC122 - Guided Waves Propagation in Composite Overwrapped Pressure Vessel Towards the Design of a Sensor Network for Structural Health Monitoring <u>Samir Mustapha</u>	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC373 - Application of magnetic recording method to the non-destructive evaluation of ferromagnetic structures <u>Tomasz Chady</u>	S23 - NDT Reliability and Statistic OC272 - A POD approach by simulation of an industrial ultrasonic inspection <u>Benoit Dupont</u>	
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DAY 5 - FRIDAY, 7 JULY 2023

07-Jul-23	SESSION				
TIME	AUDITORIUM 2	AUDITORIUM 3	AUDITORIUM 6	AUDITORIUM 8	ROOM 1.08
09:00 - 09:20	S8 - Ultrasound Phased Arrays OC340 - Overview of NDT Array Techniques Applied to Inspection of Rolling Stock <u>Giovanni Corti</u>	S5 - Materials Characterization OC44 - Development of AI based analysis tools for online monitoring of steel-making process <u>Christophe Reboud</u>	Joint EFNDT-ICNDT Workshop: Training, Qualification and Certification – the new 9712 and more	S23 - NDT Reliability and Statistic OC143 - Comparison of hit/miss and 'à versus a' POD calculations for short surface cracks using inductive thermography <u>Beate Oswald-Tranta</u>	
09:20 - 09:40	S8 - Ultrasound Phased Arrays OC268 - Parametric reconstruction of surfaces for ultrasound immersion imaging <u>Thiago A. R. Passarin</u>	S5 - Materials Characterization OC48 - How the EU project "Online Microstructure Analytics" advances inline sensing of microstructure during steel manufacturing <u>Frenk Van Den Berg</u>		S23 - NDT Reliability and Statistic OC266 - Reliability Analysis of Pipe Wall Thinning based on Quantification of Ultrasonic Testing <u>Kantaro Ikeda</u>	
09:40 - 10:00	S8 - Ultrasound Phased Arrays OC71 - Automated inspection of heavy plates with phased-array based porosity testing <u>Andreas Knam</u>	S5 - Materials Characterization OC38 - MAGNETOSTRICTIVE BEHAVIOR OF HOT-ROLLED STEELS <u>Olivier Hubert</u>		S23 - NDT Reliability and Statistic OC426 - Inspectability and POD Investigation for Optical Solar Reflector Bonded Satellite Panels <u>Utku Şahin</u>	
10:00 - 10:20	S8 - Ultrasound Phased Arrays OC295 - Automated IBEX crawler for PAUT inspection for in-service ferromagnetic assets <u>Natalia Marcial</u>	S5 - Materials Characterization OC422 - EDDY CURRENT FALSE INDICATIONS IN AUSTENITIC STEEL AND TITANIUM ALLOYS HEAT EXCHANGER TUBES ACTIVATED BY STRESS <u>Valentyn Uchanin</u>		S23 - NDT Reliability and Statistic OC281 - High energy Computed Tomography of high density alloys using a 6 MeV Linear Accelerator: detectability and use of Artificial Intelligence <u>Stefano Benuzzi</u>	
10:20 - 10:40	S8 - Ultrasound Phased Arrays OC84 - Comparative study of advanced image reconstruction algorithms for complex arbitrary components <u>Sumana Sumana</u>	#N/D		#N/D	
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u>	#N/D	Joint EFNDT-ICNDT Workshop: Training, Qualification and Certification – the new 9712 and more	S23 - NDT Reliability and Statistic OC216 - Introduction of a certification procedure for the acoustic response of reference reflectors for ultrasonic testing <u>Thomas Würschig</u>	
11:30 - 11:50	S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. <u>Paul Hillman</u>	#N/D		S23 - NDT Reliability and Statistic OC21 - USING MODELLING AND METAMODELS FOR RELIABILITY STUDY IN NDE <u>Fabrice Foucher</u>	
11:50 - 12:10	S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging <u>Guillermo Cosarinsky</u>	#N/D		#N/D	
12:10 - 12:30	S8 - Ultrasound Phased Arrays OC262 - Full Waveform Inversion for NDT using ultrasonic linear arrays <u>Thiago A. R. Passarin</u>	#N/D		x	
12:30 - 13:30	x	x	x	CLOSING CEREMONY	x

13:30 - 14:30	LUNCH
14:30	CLOSING

POSTERS / 3 - 7 JULY 2023

POSTERS Full Day	EXHIBITION & NETWORKING AREA					
3-7 Jul 2023	S1 - Additive Manufacturing P9 - Digital Twin for Robot Based Computed Tomography <u>Frank Herold</u>	S1 - Additive Manufacturing P160 - Ultrasonic Array Testing Method for Validation of Aeronautical Components in Aluminium Alloys Produced by Additive Manufacturing <u>Carla Sofia Proença</u>	S1 - Additive Manufacturing P279 - Application of Non-destructive Testing in Quality Control of Manufactured Aluminium Metal Matrix Composite Components for the Automotive Industry <u>Carla Sofia Proença</u>	S1 - Additive Manufacturing P311 - Evaluating Capacitive Imaging for Powder Bed Fusion Metal Additive Manufacturing <u>Luís Rosado</u>	S1 - Additive Manufacturing P333 - Quality Control Using Ultrasonic Phased Array Inspection of Components Produced by Directed Energy Deposition in Ti6Al4V Alloy <u>Carla Sofia Proença</u>	S20 - Green & Echo Technology P30 - Evaluation of glycerol speed of sound <u>Jaime Batista Santos</u>
	S5 - Materials Characterization P149 - STATE OF AGING CLASSIFICATION OF MODIFIED-HP STEEL TUBES BY EDDY CURRENT TEST APPLYING MACHINE LEARNING <u>Ana Carolina Brandão</u>	S5 - Materials Characterization P230 - Temperature-Controlled in-situ Tensile Tests of Polymer Tape with Single Particles <u>Sarah Heupl</u>	S5 - Materials Characterization P391 - Grinding burn classification with surface Barkhausen noise measurements <u>Suvi Santa-Aho</u>	S6 - Microwave, Terahertz, and Infrared P90 - THz computed tomography for non-destructive testing <u>Elisabeth Leiss-Holzinger</u>	S6 - Microwave, Terahertz, and Infrared P233 - Hand Lay Up process monitoring by Infrared Thermography <u>Sergio González</u>	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) P379 - Hybrid system development and application research for refrigerant leak inspection <u>Yeongil Choi</u>
	S2 - NDT Industry 4.0 P376 - Deep learning-based algorithms for ultrasound structural health monitoring in nuclear power plants' hazardous work conditions <u>Marko Budimir</u>	S2 - NDT Industry 4.0 P403 - Ultrasonic Spot Weld inspection system based on Industrial Robotic, Artificial Intelligence and Artificial Vision <u>Montserrat Acebes</u>	S2 - NDT Industry 4.0 P405 - Synchronism system for generating ultrasonic images of complex geometry pieces using industrial robots <u>Montserrat Acebes</u>	S2 - NDT Industry 4.0 P381 - Wheel and axle defect detection based on deep learning <u>Jian Ping Peng</u>	S4 - NDT of Composites P96 - Quality Control of Composite parts by robot guided Terahertz imaging <u>Elisabeth Leiss-Holzinger</u>	S23 - NDT Reliability and Statistic P388 - Value Generation: Non-Destructive Testing – How to generate value with testing <u>Vamsi Krishna Rentala</u>
	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) P346 - AI in NDT - How digitalization is leading towards an automated future in NDT <u>Dominik Nestler</u>	S13 - Numerical Simulation, Modeling and Data Processing P180 - Analysis of formation processes of informative features in eddy current probes with pulsed excitation mode <u>Luliia Lysenko</u>	S18 - Oil & Gas P51 - Conformable Digital Detector Arrays for Nondestructive Evaluation <u>Brian White</u>	S12 - Surface Methods (MPI & PT) P357 - New Eddy Current Carbon Steel Weld Inspection Probe with Easy to Interpret Signals <u>Matija Kekelj</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) P95 - Determination of the Hardness Penetration Depth in Thermally Treated Steel Parts by Laser Ultrasound <u>Wolfgang Haderer</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) P367 - NAUT application and signal analysis for detecting the unsoundness inside EV battery packs and all-solid-state batteries <u>SeongJin Lim</u>
	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) P427 - New technologies for air-coupled ultrasonic inspection <u>Andreas Bodi</u>	S8 - Ultrasound Phased Arrays P98 - Experimental verification of phased array annular probe in ultrasonic immersion setting <u>Mikael Sahl</u>				

CONFERENCE TOPICS:

SESSION	TOPIC
S1	Additive Manufacturing
S2	NDT Industry 4.0
S3	Robotics and Automation
S4	NDT of Composites
S5	Materials Characterization
S6	Microwave, Terahertz, and Infrared
S7	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)
S8	Ultrasound Phased Arrays
S9	Guided Waves
S10	Micro & Nano Technology and High-Resolution NDT
S11	Art & Cultural Heritage
S12	Surface Methods (MPI & PT)
S13	Numerical Simulation, Modelling and Data Processing
S14	Transportation (Railway, Automotive, Marine, Aerospace)
S15	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)
S16	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials
S17	Energy Generation (Fossil, Nuclear and Regenerative Power Generation)
S18	Oil & Gas
S19	Biomedical Technology
S20	Green & Echo Technology
S21	Food & Agriculture
S22	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination)

S23	NDT Reliability and Statistic
S24	Qualification, certification, standards and training
S25	Academia International Research Day (AIRD)

LEGEND:

S	Session of the Conference Topic
OC	Oral Communication
P	Poster