13TH EUROPEAN CONFERENCE ON NON-DESTRUCTIVE TESTING

LISBON - PORTUGAL, 3-7 JULY 2023

DAY 1 - MONDAY, 3 JULY 2023

03-Jul-23 TIME	SESSION ROOM 1	ROOM 2	ROOM 3	ROOM 6	ROOM 8	ROOM 1.08
09:00 - 12:30	OPENING CEREMONY	x	x	x	x	x
12:30 - 14:10	LUNCH					
14:10 - 14:30	S1 - Additive Manufacturing OC103 - Defect Detection in Additively Manufactured Parts by Laser Ultrasound Tomography Bernhard Reitinger	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	S17 - 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	S23 - 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 Schratt	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 quefrency 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				
	ROOM 2	ROOM 3	ROOM 6	ROOM 8	ROOM 1.08
09:00 - 09:20	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC428 - Online quality monitoring in the production of organo sheets by air-coupled ultrasonic testing Ralf Steinhausen	**S4 - NDT of Composites** OC150 - CREATION AND NON-DESTRUCTIVE CONTROL OF ELECTRIC HEATING ELEMENTS OF THE AIRCRAFT ICING PREVENTION SYSTEM Mykhail Kazakevych	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC78 - Time reversal method applied to leaky Lamb waves in an immersed layered medium Jean-Christophe Vallée	**S1 - Additive Manufacturing** OC310 - Near Field Microwave Probe for Metal Additive Manufacturing Imaging Luís Rosado	**S13 - Numerical Simulation, Modeling and Data Processing** OC412 - Numeric Prediction of the Detail Visibility in Industrial X-Ray Computed Tomography by Human Observers Uwe Ewert
09:20 - 09:40	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC256 - Directivity of laser generated ultrasonic waves in thermoelastic regime Xin Tu	**S4 - NDT of Composites** OC196 - Acoustic material testing a progressive testing method. Jörg Ritter	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC176 - Multi-dimensional data fusion study for ultrasonic and radiographic non-destructive inspections Elena Jasiuniene	**S1 - Additive Manufacturing** OC205 - Automated Multi-Modal In-Process Non-Destructive Evaluation of Wire + Arc Additive Manufacturing Ehsan Mohseni	**S13 - Numerical Simulation, Modeling and Data Processing** OC252 - Industrial Radiography simulation with a Monte-Carlo model including full physics Andreas Schumm
09:40 - 10:00	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC81 - Automated laser ultrasound for weld seams Norbert Huber	**S4 - NDT of Composites** OC91 - Investigation of Kissing Bonds in Adhesive Joints Mike Kornely	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC178 - Inductive arrays for inspection of curved structures Alexis Hernandez	**S1 - Additive Manufacturing** OC324 - Inline inspection of metal parts produced by Wire and Arc Additive Manufacturing (WAAM) Telmo G. Santos	**S13 - Numerical Simulation, Modeling and Data Processing** OC301 - Realistic Simulation of CT Systems - An Introduction to The CTSimU2 Project Carsten Bellon
10:00 - 10:20	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC67 - Noncontact measurement of bolt axial force during tightening processes using scattered laser ultrasonic waves So Kitazawa	**S4 - NDT of Composites** OC382 - A new Defects Detection Method in CFRP with non-contact Lamb Waves Propagation and Wavelet Transform Analysis Lea Lecointre	**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 Renaldas Raisutis	**S1 - Additive Manufacturing** OC337 - Flaw Detection in Wire and Arc Additive Manufacturing Using In-Situ Wide Frequency Bandwidth Acoustic Pressure André Ramalho	**S13 - Numerical Simulation, Modeling and Data Processing** OC118 - Anomalies detector on industrial radiographies: application on High Pressure Turbine Blades Clément Remacha
10:20 - 10:40	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC42 - Combination of laser ultrasonics and thermography for enhanced defect characterization in CFRP parts Bernhard Reitinger	**S4 - NDT of Composites** OC240 - Nonlinear Guided Wave Damage Imaging in Composite Structures Using A Sparse Sensor Network Yusheng Ma	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC258 - Effect of Object Thickness on Resolution of TDI X-ray Detectors Anthony Dimalanta	**S1 - Additive Manufacturing** OC441 - Tomosynthesis for large additive manufacturing parts Anne-Françoise Obaton	**S13 - Numerical Simulation, Modeling and Data Processing** OC254 - Improvement of radiographic images quality using algorithms dedicated to geometric blur reduction Nezha Mamouni
10:40 - 11:10	**COFFEE-BREAK**				
11:10 - 11:30	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC55 - Assessment of metallurgical properties on moving steel strips at high temperature with laser ultrasonics Guillaume Cousin	**S4 - NDT of Composites** OC223 - 3D-characterization of carbon fibre reinforced polymers by Talbot-Lau grating interferometry radioscopy and computed tomography Johann Kastner	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC297 - PAUT and ToFD performance demonstration on HDPE joints Ludovic Pinier	**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 Julian Ehrler	**S13 - Numerical Simulation, Modeling and Data Processing** OC407 - Simulation of Eddy Current Rail Testing Data for Neural Networks Alexander Friedrich
11:30 - 11:50	**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 Serge Dos Santos	**S4 - NDT of Composites** OC401 - Inspection benchmarking of Fibre Reinforced Polymeric Composites produced by Additive Manufacturing Miguel A. Machado	**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 Viswa Ratnasri Sunkavalli	**S1 - Additive Manufacturing** OC166 - In-process Non-Destructive Evaluation of Wire + Arc Additive Manufacture Components Using Ultrasound High-Temperature Dry-Coupled Roller-Probe Rastislav Zimermann	**S13 - Numerical Simulation, Modeling and Data Processing** OC34 - Formulation of a Mechanical Stress Dependent Macroscopic Magnetic Model for Incremental Permeability Simulation Patrick Lombard
11:50 - 12:10	**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 Josef Pörnbacher	**S4 - NDT of Composites** OC54 - Multi-domain contactless NDI approach: Data fusion of structural light scanning with thermography and shearography Patrick Jansen	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC384 - Thermal stress opening of closed cracks with local cooling on the cracked surface Arthur Perrin	**S2 - NDT Industry 4.0** OC83 - Monitoring Barkhausen noise measurements to detect and reduce grinding burn and case depth defects in manufactured parts Kizkitza Gurruchaga	**S13 - Numerical Simulation, Modeling and Data Processing** OC368 - A Physics-informed Neural Network for Pulsed Thermography-Based Defect Detection and Parameter Estimation Yuan Yao

Time	Column 1	Column 2	Column 3	Column 4	Column 5
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 Kyung-young Jhang	**S4 - NDT of Composites** OC284 - Automated woven background removal for enhanced infrared thermographic inspection of composites Gaétan Poelman	**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 Klaus Dickmann	**S2 - NDT Industry 4.0** OC146 - A Machine Learning Based-Guided Wave Approach for Damage Detection and Assessment in Composite Overwrapped Pressure Vessels Amir Charmi	**S13 - Numerical Simulation, Modeling and Data Processing** OC204 - Spatial resolution in photothermal and photoacoustic imaging Peter Burgholzer
12:30 - 12:50	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC380 - A study on the nonlinear correlation between viscoelasticity and guided ultrasound Younho Cho	**S4 - NDT of Composites** OC27 - Porosity in Carbon Fiber laminate part. Porosity coupons for the evaluation of the percentage voids volume. Valter Capitani	**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. Andrew Simpson	**S2 - NDT Industry 4.0** OC190 - Laser ultrasonics for online monitoring of microstructures in the hot strip mill Mikael Malmström	**S13 - Numerical Simulation, Modeling and Data Processing** OC265 - A WebGPU-based acoustic wave simulator for ultrasound NDT Thiago A. R. Passarin
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 Mario Wolf	**S4 - NDT of Composites** OC56 - Computed tomography investigations of 3D aluminum - GMT hybrid profiles manufactured by compression molding Manel Ellouz	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC414 - Quantitative analysis of delaminations by means of lock-in infrared thermography Javier Rodríguez-Aseguinolaza	**S2 - NDT Industry 4.0** OC195 - Using DICONDE for NDT Data Fusion Geo Jacob	**S13 - Numerical Simulation, Modeling and Data Processing** OC263 - Using Perfectly Matched Layer in a GPU simulation of ultrasound NDT Thiago A. R. Passarin
14:30 - 14:50	**S19 - Biomedical Technology** OC85 - Modelling of an ultrasound-based system for cataract detection and classification Mário Santos	**S4 - NDT of Composites** OC243 - Defect-aware Super-resolution Thermography by Adversarial Learning Cheng Liangliang	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC88 - Mimicking dam upstream slope scenarios in acrylic tanks for ultrasonic evaluation Tiago Dourado	**S2 - NDT Industry 4.0** OC92 - Reduction of rejects by combining data from the casting process and automatic X-ray inspection Thomas Stocker	**S13 - Numerical Simulation, Modeling and Data Processing** OC293 - Determining ultrasonic propagation effective properties in complex heterogeneous media through microstructure-scale simulation Vincent Dorval
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 Michael Kaack	**S4 - NDT of Composites** OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures Wolfgang Holub	**S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials** OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores Tiago Dourado	**S2 - NDT Industry 4.0** OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor Fanfu Wu	**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 Shan Lin
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 Jaesun Lee	**S4 - NDT of Composites** OC361 - X-ray Computed Tomography Inspection of Novel Ceramic Matrix Composites Nick Brierley	**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC241 - Self-sensing metallic material based on piezoelectric particles Pedro Ferreira	**S2 - NDT Industry 4.0** OC1 - On the use of inline phase transformation sensors in a hot strip mill: a case study Haibing Yang	**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 Sanjeevareddy Kokoori
15:30 - 15:50	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC437 - IN-SERVICE OIL REFINERIES STORAGE TANK INSPECTION WITH GUIDED WAVES. Levente Bazsanyi	**S4 - NDT of Composites** OC39 - NDT & METROLOGY – Improving Efficiency in Aerospace Manufacturing utilizing the Multi-Modality Approach Thomas Gramberger	**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC12 - Working Smart Using Wireless UT Sensors for Asset Integrity Monitoring Steve Strachan	**S2 - NDT Industry 4.0** OC19 - HIGH TEMPERATURE CHARACTERISATION OF THE STIFFNESS MATRIX OF DIFFERENT STEELS Arno Volker	**S9 - Guided Waves** OC234 - Excitation and reception of higher order guided Lamb waves in sheet type composite structures using phased air-coupled ultrasonic arrays Justina Sestoke
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 Guillemette Ribay	**S4 - NDT of Composites** OC288 - Developing in-line inductive probes for carbon fibre composite manufacturing Robert Hughes	#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 Masaki Nagai
16:10 - 16:40	**COFFEE-BREAK**				

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

DAY 3 - WEDNESDAY, 5 JULY 2023

05-Jul-23 TIME	SESSION ROOM 2	ROOM 3	ROOM 6	ROOM 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 André Dalmora	**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 Saeid Hedayatrasa	**S2 - NDT Industry 4.0** OC140 - Platform for ultrasonic data management and evaluation Iratxe Aizpurua	**S18 - Oil & Gas** OC62 - Development of HOIS guidance for ultrasonic NDT for non-intrusive inspection at elevated temperatures Helen Peramatzis
09:20 - 09:40	**S9 - Guided Waves** OC436 - Lamb Wave Mode Conversion Analysis for Crack Assessment Artur Ribeiro		**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 Nina Kergosien	**S2 - NDT Industry 4.0** OC171 - Automated adaptive TFM method for gas turbine testing in NDE 4.0 Christian Hassenstein	**S18 - Oil & Gas** OC110 - Field inspection of steel pipes using automatic UT Raphaël Michel
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 Ahmed Bayoumi		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC280 - Damage Monitoring of Buried Pipelines under Harsh Noise Environment using Low Frequency Acoustic Emission Analysis Sun-Ho Lee	**S2 - NDT Industry 4.0** OC335 - Transforming Ultrasonic Inspection Data Management through Cloud-Based Solutions André Lamarre	**S18 - Oil & Gas** OC124 - Ultrasonic inspection of "shaped pipes" Fabien Lefevre

Time	Session (col 2)	S25 - ACADEMIA INTERNATIONAL RESEARCH DAY	S15 - Monitoring	S2 - NDT Industry 4.0	S18 / S11
10:00 - 10:20	**S9 - Guided Waves** OC275 - A Realistic 'digital twin' for guided wave SHM of pipelines Panpan Xu		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC448 - SHM of wire- breakage in concrete bridges by Acoustic Emission Technique Horst Trattnig	**S2 - NDT Industry 4.0** OC35 - Production Integrated CT Inspection Process Alexander Suppes	**S18 - Oil & Gas** OC264 - Virtual encoder: a two-dimension visual odometer for NDT Thiago A. R. Passarin
10:20 - 10:40	**S9 - Guided Waves** OC334 - Development of a digital twin for generating realistic ultrasonic guided wave signals Vivek Nerlikar		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC416 - Automatized Scaling Monitoring in Pipelines with Acoustic Resonance Testing Isabelle Stüwe	**S2 - NDT Industry 4.0** OC175 - Magneto-Optic Screening Technology for Integrity Monitoring of Pipelines Gabriel Dinis	**S18 - Oil & Gas** OC356 - Detection and Characterisation of Hydrogen-Induced Cracking using ultrasonic NDT inspection techniques Peter Merck
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 Bo Feng	**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 Masoud Mohammadgholiha	**S2 - NDT Industry 4.0** OC134 - Numerical study of the Line Scan InfraRed Thermography (LST-IR) to optimize the inspection of aircraft structures Ludovic Gaverina	**S18 - Oil & Gas** OC255 - Evaluation and Simulation of HTHA Damaged Specimen using UT Advanced Techniques Bastien Clausse
11:30 - 11:50	**S9 - Guided Waves** OC154 - Guided waves defect interaction coefficients obtained through image-based models Daniel Lozano		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC206 - Acoustic non-destructive testing of UAV´s propellers during predeparture and post-flight checks Maria Soria Gomez	**S2 - NDT Industry 4.0** OC283 - Automatic defect detection in fiber-reinforced polymer matrix composites using thermographic vision data Nuno Mendes	**S18 - Oil & Gas** OC369 - Phased Array Ultrasonic Testing for Inspection of LNG Storage Tank Soonho Won
11:50 - 12:10	**S9 - Guided Waves** OC159 - On the development of a model-assisted design procedure of guided wave-based SHM systems Enes Savli		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC415 - An Acoustic Emission IoT Device for Wind Turbine Rotor Blade Condition Monitoring Valery Godinez-Azcuaga	**S2 - NDT Industry 4.0** OC181 - Applications of Deep Learning in NDE Ryan Scott	**S18 - Oil & Gas** OC202 - Latest Developments in the Hardspot Inspection of heavy plates Gerald Schneibel
12:10 - 12:30	**S13 - Numerical Simulation, Modeling and Data Processing** OC435 - Detection of flaws in austenitic stainless steel plate using eddy current testing Helena Ramos		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC174 - NDE & Sensing Solutions for Pipeline Structural Health Monitoring Bruno Moreira	**S2 - NDT Industry 4.0** OC396 - Automatic defect recognition on parts after MPI and FPI Radek Salac	**S18 - Oil & Gas** OC438 - Low-cost tool for identifying illegal tapping used for fuel theft Lucas Braga Campos
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 Artur Ribeiro		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC294 - Guided waves based SHM system for rail monitoring and its environmental impact Bastien Chapuis	**S2 - NDT Industry 4.0** OC184 - An analysis of how a software platform can achieve complete digital transformation using Radiographic Testing as an example Lea Köhler	**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. John Hansen
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. Emiel Hassefras	**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 Gerald Lackner	**S2 - NDT Industry 4.0** OC303 - Strategy for NDTE education at universities in France Serge Dos Santos	**S11 - Art & Cultural Heritage** OC20 - Ten+ Years of Experience in Digitization of Cultural Heritage by Means of Industrial X-ray Computed Tomography: A Summary Theobald Fuchs
14:30 - 14:50	**S9 - Guided Waves** OC193 - Numerical Assessment of Guided Wave Tomography in a Pipe Bend Based on Full Waveform Inversion Carlos Omar Rasgado Moreno		**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** OC410 - CORROSION BASED DEFECT DETECTION AND CLASIFICATION IN PIPE WALL USING MULTIPLE HIGH ORDER ULTRASONIC GUIDED WAVE MODES Donatas Cirtautas	**S2 - NDT Industry 4.0** OC287 - Advanced machine learning for dissimilar metal weld phased array ultrasonic inspection Tuomas Koskinen	**S11 - Art & Cultural Heritage** OC87 - Non-Destructive Examination of Metallic Idols and Statues in Religious Institutions - A Case Study Tejas Ingale

Time					
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 Aadhik Asokkumar		#N/D	**S2 - NDT Industry 4.0** OC192 - NDE 4.0 – Digital Transformation of NDE Lennart Schulenburg	**S11 - Art & Cultural Heritage** OC429 - Non-Destructive Testing of Artworks from the Artist Cy Twombly Juliana Berthold
15:10 - 15:30	**S9 - Guided Waves** OC249 - Damage imaging and wavenumber mapping for inspection of bonded CFRP plates using ultrasonic guided waves Mohsen Barzegar		**S14 - Transportation (Railway, Automotive, Marin, Aerospace)** OC28 - Reliable detection of stick welds at resistance spot welding Christian Mathiszik	**S2 - NDT Industry 4.0** OC364 - Unified NDT Inspection Software platform to the service of NDE community Patrick Huot	**S11 - Art & Cultural Heritage** OC300 - Active thermography to look beneath the surface of a historic German aircraft Julia Frisch
15:30 - 15:50	**S9 - Guided Waves** OC286 - Inspection of CFRP Aircraft Components using Guided Wavefield Imaging in Wavenumber-Frequency domain Mathias Kersemans		**S14 -Transportation (Railway, Automotive, Marin, Aerospace)** OC292 - Adaptive ultrasonic rail wheel testing system with advanced phased array technology Thomas Würschig	**S2 - NDT Industry 4.0** OC394 - Magnetic crawler for welds Visual Testing, based on 3D profilometry and 2D image processing Marco Induti	**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 Ion Tiseanu
15:50 - 16:10	**S9 - Guided Waves** OC343 - The use of segmented Magneto-strictive tools for Medium Range Ultrasonic Inspection of pipelines Andrew Simpson		**S14 -Transportation (Railway, Automotive, Marin, Aerospace)** OC72 - Innovative concept enables higher sensitivities in ultrasonic testing of railroad wheels Andreas Knam	#N/D	**S11 - Art & Cultural Heritage** OC312 - Laminographic Imaging of a Medieval Panel Painting by RoboCT Wolfgang Holub
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 Abdul Mateen Qadri	**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 Tobias Bruch	**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. Luca Scaccabarozzi	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** OC 317 - OLED Glass Substrates Inspection using Air-coupled Ultrasonic Testing Bonggyu Ji
17:00 - 17:20	**S9 - Guided Waves** OC235 - Data-Driven Remaining Useful Life Prognostic for Aeronautical Composite Structures based on Guided Waves Ferda Cansu GÜL		**S14 -Transportation (Railway, Automotive, Marin, Aerospace)** OC229 - Assessment of residual stresses in railway rails using ultrasonic and Barkhausen noise techniques Young-In Hwang	**S2 - NDT Industry 4.0** OC431 - Data processing to analyze health state in X-ray modules Pascal Corbat	
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	ROOM 2	ROOM 3	ROOM 6	ROOM 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** Peter Trampus President of Academia NDT International, Hungary	x	x	x
09:10 - 09:50	x	**NDE and Deep Learning: Fashion Trend or the Future?** Keynote Presentation - Roman Gr. Maev University of Windsor, Canada	x	x	x

09:50 - 10:20	x	**The perspective of Academia NDT International** Peter Trampus 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** Giuseppe Nardoni, N. Fallahi, P. Nardoni 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** Younho Cho 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** Keynote presentation - Peter Trampus [1], Vjera Krstelj [2] 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.** Reza Zoughi 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** Colin Brett 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** Manfred Johannes 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** Uwe Ewert [1], Viktor Lyamkin [2], Christian Boller [1, 3] 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

TIME	ROOM 2	ROOM 3	ROOM 6	ROOM 8	ROOM 1.08
14:30 - 14:50	x	**Strategy for NDTE Education at Universities in France** Philippe Duvauchelle 1, Rachid El-Guerjouma 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	SESSION				
TIME	**ROOM 2**	**ROOM 3**	**ROOM 6**	**ROOM 8**	**ROOM 1.08**
09:00 - 09:20	**S9 - Guided Waves** OC270 - Use of periodic structures for mode transformation in cylindrical objects I Boris	**S5 - Materials Characterization** OC3 - HIGH TEMPERATURE MAGNETIC PROPERTIES OF SELECTED STEEL GRADES John Wilson	**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 Thomas Wuerschig	**S2 - NDT Industry 4.0** OC120 - A path towards digital industry: Airblade grains detection by directional reflectance technique Clément Remacha	**S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation)** OC245 - Development and adaptation of Ultrasonic system for Windblades inspection using Unmanned Aerial Vehicles Sergio González
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 Sergey Vinogradov	**S5 - Materials Characterization** OC105 - Non-destructive magnetic evaluation of microstructure and mechanical properties of advanced high-strength steels Ane Martinez-de-Guerenu	**S14 - Transportation (Railway, Automotive, Marin, Aerospace)** OC82 - Scanning pulse phase thermography for surface defect detection in manganese steel turnout frogs Christoph Tuschl	**S2 - NDT Industry 4.0** OC53 - Automating 'Image-Based Simulation' with machine learning for virtual quality assurance in industrial applications Llion Evans	**S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation)** OC79 - Automated analysis of Baffle Bolts Javier De La Morena

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

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

| 18:00 - 18:20 | **S8 - Ultrasound Phased Arrays**
OC68 - Inspection for non-planar shaped welded joints of pipes using FMC ultrasonic technique

Sho Yamaguchi | **S9 - Guided Waves**
OC122 - Guided Waves Propagation in Composite Overwrapped Pressure Vessel Towards the Design of a Sensor Network for Structural Health Monitoring

Samir Mustapha | **S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination)**
OC373 - Application of magnetic recording method to the non-destructive evaluation of ferromagnetic structures

Tomasz Chady | **S23 - NDT Reliability and Statistic**
OC272 - A POD approach by simulation of an industrial ultrasonic inspection

Benoit Dupont | |

DAY 5 - FRIDAY, 7 JULY 2023

07-Jul-23 TIME	SESSION ROOM 2	ROOM 3	ROOM 6	ROOM 8	ROOM 1.08
09:00 - 09:20	**S8 - Ultrasound Phased Arrays** OC340 - Overview of NDT Array Techniques Applied to Inspection of Rolling Stock Giovanni Corti	**S5 - Materials Characterization** OC44 - Development of AI based analysis tools for online monitoring of steel-making process Christophe Reboud	**Joint EFNDT-ICNDT Workshop:** Training, Qualification and Certification – the new 9712 and more	**S23 - NDT Reliability and Statistic** OC143 - Comparison of hit/miss and 'â versus a' POD calculations for short surface cracks using inductive thermography Beate Oswald-Tranta	
09:20 - 09:40	**S8 - Ultrasound Phased Arrays** OC268 - Parametric reconstruction of surfaces for ultrasound immersion imaging Thiago A. R. Passarin	**S5 - Materials Characterization** OC48 - How the EU project "Online Microstructure Analytics" advances inline sensing of microstructure during steel manufacturing Frenk Van Den Berg		**S23 - NDT Reliability and Statistic** OC266 - Reliability Analysis of Pipe Wall Thinning based on Quantification of Ultrasonic Testing Kantaro Ikeda	
09:40 - 10:00	**S8 - Ultrasound Phased Arrays** OC71 - Automated inspection of heavy plates with phased-array based porosity testing Andreas Knam	**S5 - Materials Characterization** OC38 - MAGNETOSTRICTIVE BEHAVIOR OF HOT-ROLLED STEELS Olivier Hubert		**S23 - NDT Reliability and Statistic** OC426 - Inspectability and POD Investigation for Optical Solar Reflector Bonded Satellite Panels Utku Şahin	
10:00 - 10:20	**S8 - Ultrasound Phased Arrays** OC295 - Automated IBEX crawler for PAUT inspection for in-service ferromagnetic assets Natalia Marcial	**S5 - Materials Characterization** OC422 - EDDY CURRENT FALSE INDICATIONS IN AUSTENITIC STEEL AND TITANIUM ALLOYS HEAT EXCHANGER TUBES ACTIVATED BY STRESS Valentyn Uchanin		**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 Stefano Benuzzi	
10:20 - 10:40	**S8 - Ultrasound Phased Arrays** OC84 - Comparative study of advanced image reconstruction algorithms for complex arbitrary components Sumana Sumana	#N/D		#N/D	
10:40 - 11:10	**COFFEE-BREAK**				
11:10 - 11:30	**S8 - Ultrasound Phased Arrays** OC99 - Ultrasonic Inspection for Complex Geometry Matt Chandler	#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 Thomas Würschig	
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. Paul Hillman	#N/D		**S23 - NDT Reliability and Statistic** OC21 - USING MODELLING AND METAMODELS FOR RELIABILITY STUDY IN NDE Fabrice Foucher	
11:50 - 12:10	**S8 - Ultrasound Phased Arrays** OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging Guillermo Cosarinsky	#N/D		#N/D	
12:10 - 12:30	**S8 - Ultrasound Phased Arrays** OC262 - Full Waveform Inversion for NDT using ultrasonic linear arrays Thiago A. R. Passarin	#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 Frank Herold	**S1 - Additive Manufacturing** P160 - Ultrasonic Array Testing Method for Validation of Aeronautical Components in Aluminium Alloys Produced by Additive Manufacturing Carla Sofia Proença	**S1 - Additive Manufacturing** P279 - Application of Non-destructive Testing in Quality Control of Manufactured Aluminium Metal Matrix Composite Components for the Automotive Industry Carla Sofia Proença	**S1 - Additive Manufacturing** P311 - Evaluating Capacitive Imaging for Powder Bed Fusion Metal Additive Manufacturing Luís Rosado	**S1 - Additive Manufacturing** P333 - Quality Control Using Ultrasonic Phased Array Inspection of Components Produced by Directed Energy Deposition in Ti6Al4V Alloy Carla Sofia Proença	**S20 - Green & Echo Technology** P30 - Evaluation of glycerol speed of sound Jaime Batista Santos
	S5 - Materials Characterization P149 - STATE OF AGING CLASSIFICATION OF MODIFIED-HP STEEL TUBES BY EDDY CURRENT TEST APLYING MACHINE LEARNING Ana Carolina Brandão	**S5 - Materials Characterization** P230 - Temperature-Controlled in-situ Tensile Tests of Polymer Tape with Single Particles Sarah Heupl	**S5 - Materials Characterization** P391 - Grinding burn classification with surface Barkhausen noise measurements Suvi Santa-Aho	**S6 - Microwave, Terahertz, and Infrared** P90 - THz computed tomography for non-destructive testing Elisabeth Leiss-Holzinger	**S6 - Microwave, Terahertz, and Infrared** P233 - Hand Lay Up process monitoring by Infrared Thermography Sergio González	**S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)** P379 - Hybrid system development and application research for refrigerant leak inspection Yeongil Choi
	S2 - NDT Industry 4.0 P376 - Deep learning-based algorithms for ultrasound structural health monitoring in nuclear power plants' hazardous work conditions Marko Budimir	**S2 - NDT Industry 4.0** P403 - Ultrasonic Spot Weld inspection system based on Industrial Robotic, Artificial Intelligence and Artificial Vision Montserrat Acebes	**S2 - NDT Industry 4.0** P405 - Synchronism system for generating ultrasonic images of complex geometry pieces using industrial robots Montserrat Acebes	**S2 - NDT Industry 4.0** P381 - Wheel and axle defect detection based on deep learning Jian Ping Peng	**S4 - NDT of Composites** P96 - Quality Control of Composite parts by robot guided Terahertz imaging Elisabeth Leiss-Holzinger	**S23 - NDT Reliability and Statistic** P388 - Value Generation: Non-Destructive Testing – How to generate value with testing Vamsi Krishna Rentala
	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) P346 - AI in NDT - How digitalization is leading towards an automated future in NDT Dominik Nestler	**S13 - Numerical Simulation, Modeling and Data Processing** P180 - Analysis of formation processes of informative features in eddy current probes with pulsed excitation mode Iuliia Lysenko	**S18 - Oil & Gas** P51 -Conformable Digital Detector Arrays for Nondestructive Evaluation Brian White	**S12 - Surface Methods (MPI & PT)** P357 - New Eddy Current Carbon Steel Weld Inspection Probe with Easy to Interpret Signals Matija Kekelj	**S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)** P95 - Determination of the Hardness Penetration Depth in Thermally Treated Steel Parts by Laser Ultrasound Wolfgang Haderer	**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 SeongJin Lim
	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) P427 - New technologies for air-coupled ultrasonic inspection Andreas Bodi	**S8 - Ultrasound Phased Arrays** P98 - Experimental verification of phased array annular probe in ultrasonic immersion setting Mikael Sahl				

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

Please note the Programme is still subject to change

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