

PROGRAMME DAY-BY-DAY

3-7 JULY TIME	DAY 1 MONDAY, 3 JULY 2023	DAY 2 TUESDAY, 4 JULY 2023	DAY 3 WEDNESDAY, 5 JULY 2023	DAY 4 THURSDAY, 6 JULY 2023	DAY 5 FRIDAY, 7 JULY 2023
FULL DAY	OPENING CEREMONY	<p>S1 - Additive Manufacturing S4 - NDT of Composites S7 - Ultrasound (EMAT, Laser Ultrasonics, Air coupled, nonlinear) S13 - Numerical Simulation, Modeling and Data Processing S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials</p>	<p>S2 - NDT Industry 4.0 S9 - Guided Waves S13 - Numerical Simulation, Modeling and Data Processing S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) S18 - Oil & Gas S25 - ACADEMIA INTERNATIONAL RESEARCH DAY</p>	<p>S2 - NDT Industry 4.0 S3 - Robotics and Automation S5 - Materials Characterization S8 - Ultrasound Phased Arrays S9 - Guided Waves S12 - Surface Methods (MPI & PT) S14 - Transportation (Railway, Automotive, Marin, Aerospace) S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination)</p>	<p>S5 - Materials Characterization S8 - Ultrasound Phased Array S23 - NDT Reliability and Statistic</p>
		COFFEE-BREAK			
		<p>S1 - Additive Manufacturing S2 - NDT Industry 4.0 S4 - NDT of Composites S7 - Ultrasound (EMAT, Laser Ultrasonics, Air coupled, nonlinear) S13 - Numerical Simulation, Modeling and Data Processing S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials</p>	<p>S2 - NDT Industry 4.0 S9 - Guided Waves S13 - Numerical Simulation, Modeling and Data Processing S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) S18 - Oil & Gas S25 - Academia International Research Day (AIRD)</p>	<p>S3 - Robotics and Automation S5 - Materials Characterization S8 - Ultrasound Phased Arrays S18 - Oil & Gas S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination)</p>	<p>S8 - Ultrasound Phased Array S23 - NDT Reliability and Statistic</p>
	LUNCH				
	<p>S1 - Additive Manufacturing S4 - NDT of Composites S7 - Ultrasound (EMAT, Laser Ultrasonics, Air coupled, nonlinear) S12 - Surface Methods (MPI & PT) S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials S20 - Green & Echo Technology</p>	<p>S2 - NDT Industry 4.0 S4 - NDT of Composites S7 - Ultrasound (EMAT, Laser Ultrasonics, Air coupled, nonlinear) S9 - Guided Waves S13 - Numerical Simulation, Modeling and Data Processing S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials S19 - Biomedical Technology</p>	<p>S2 - NDT Industry 4.0 S9 - Guided Waves S11 - Art & Cultural Heritage S14 - Transportation (Railway, Automotive, Marin, Aerospace) S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) S25 - ACADEMIA INTERNATIONAL RESEARCH DAY</p>	<p>S3 - Robotics and Automation S5 - Materials Characterization S8 - Ultrasound Phased Arrays S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination)</p>	
	COFFEE-BREAK				
	<p>S1 - Additive Manufacturing S4 - NDT of Composites S7 - Ultrasound (EMAT, Laser Ultrasonics, Air coupled, nonlinear) S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials S20 - Green & Echo Technology</p>	<p>S2 - NDT Industry 4.0 S4 - NDT of Composites S6 - Microwave, Terahertz, and Infrared S9 - Guided Waves S13 - Numerical Simulation, Modeling and Data Processing S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)</p>	<p>S2 - NDT Industry 4.0 S7 - Ultrasound (EMAT, Laser Ultrasonics, Air coupled, nonlinear) S9 - Guided Waves S14 - Transportation (Railway, Automotive, Marin, Aerospace)</p>	<p>S5 - Materials Characterization S8 - Ultrasound Phased Arrays S9 - Guided Waves S21 - Food & Agriculture S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) S23 - NDT Reliability and Statistic S24 - Qualification, certification, standards and training</p>	
	WELCOME RECEPTION		GALA DINNER		
					CLOSING CEREMONY

03-Jul-23 TIME	SESSION				
	AUDITORIUM I	AUDITORIUM II	AUDITORIUM III	AUDITORIUM VI	AUDITORIUM VIII
09:00 - 12:30	<p>OPENING CEREMONY</p> <p><u>Álvaro Ribeiro</u> President, RELACRE</p> <p><u>Bento Alves</u> President, ECNDT 2023</p> <p><u>Sajeesh K. Babu</u> Chairman, ICNDT</p> <p><u>Fermín Gómez Fraile</u> President, EFNDT</p> <p><u>Hanane Taidi</u> Director General, TIC Council</p> <p><u>Dr. Johannes Vrana</u> CEO, Vrana GmbH</p> <p><u>Mohamed Elkarmoty</u> Faculty of Engineering, Cairo University Assistant Professor, ScanPyramids Deputy Coordinator</p> <p><u>Telmo G. Santos</u> Full Professor, NOVA School of Science and Technology</p> <p>EFNDT Awards</p>	x	x	x	x
12:30 - 14:10	LUNCH				
Chairs 14:10 - 16:10	Matthias Pelkner Luís Rosado	Mate Gaal	Michele Cevenini	Mohsen Aghadavoudi Jolfaei José Neves	Mathias Kersemans Sergio Gonzalez
14:10 - 14:30	<p>S1 - Additive Manufacturing OC103 - Defect Detection in Additively Manufactured Parts by Laser Ultrasound Tomography</p> <p><u>Bernhard Reitingner</u></p>	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC421 - Multi-functional ultrasound phased array imaging</p> <p><u>Choon-su Park</u></p>	<p>S12 - Surface Methods (MPI & PT) OC32 - Bio Water Based Liquid Penetrants and Magnetics: a safer and cost-efficient solution for the future</p> <p><u>Michele Cevenini</u></p>	<p>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</p> <p><u>Mohsen Aghadavoudi Jolfaei</u></p>	<p>S4 - NDT of Composites OC137 - Ultrasonic Inspection for aging monitoring of GFRP composites</p> <p><u>Marcella Grosso</u></p>
14:30 - 14:50	<p>S1 - Additive Manufacturing OC93 - Inspection of Additive manufacturing parts, study of NDT solutions for WAAM</p> <p><u>Fabien Lefevre</u></p>	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC130 - Phased array probes for air-coupled ultrasonic testing based on cellular polymer</p> <p><u>Mate Gaal</u></p>	<p>S20 - Green & Echo Technology OC 31 - Work safety in magnetic particle and penetrant testing</p> <p><u>Kersten Alward</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC61 - Active Infrared Thermography applied for concrete structures inspection in Nuclear Power Plants</p> <p><u>Alba Galan Entonado</u></p>	<p>S4 - NDT of Composites OC18 - MEMS - sensor array for non-contact ultrasonic composite panel inspection</p> <p><u>Arno Volker</u></p>
14:50 - 15:10	<p>S1 - Additive Manufacturing OC212 - Online eddy current testing of PBF-LB/M parts using GMR sensor arrays during manufacturing</p> <p><u>Matthias Pelkner</u></p>	<p>S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC107 - Thermoacoustic phased-array radiators – Theory, characteristics, and applications</p> <p><u>Daniel Hufschläger</u></p>	<p>S12 - Surface Methods (MPI & PT) OC57 - UVA-LED's in fluorescent penetrant inspection and magnetic partial inspection</p> <p><u>Jesko Klippstein</u></p>	<p>S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC319 - Advanced Eddy Current Testing of Carbon Composites</p> <p><u>Marie Rudolfova</u></p>	<p>S4 - NDT of Composites OC232 - Air-coupled Ultrasonic Inspection of Thermoplastic Composite Structures for Aerospace Vehicles</p> <p><u>Armin Huber</u></p>

15:10 - 15:30	S1 - Additive Manufacturing OC76 - Multi-physics data registration for the improvement of Additive Manufacturing process control <u>Jitendra Singh Rathore</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC182 - Phased-Array Approach to Air-coupled Ultrasound with Resonant Defect Excitation <u>Timo Reindl</u>	S12 - Surface Methods (MPI & PT) OC89 - Development of an Automatic magnetic particle flaw detector System Using Deep Learning <u>Daisuke Nagata</u>	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 <u>Nicolas Pouliot</u>	S4 - NDT of Composites OC246 - Ad-hoc solutions for ultrasonic inspection of highly complex aircraft composite structures <u>Sergio González</u>
15:30 - 15:50	S1 - Additive Manufacturing OC16 - INDUSTRIAL APPLICATION OF HIGH ENERGY CT <u>Eberhard Neuser</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC153 - Non-Destructive Testing of Battery Pouches with Imaging Ultrasonic Techniques <u>Artur Szewieczek</u>	S12 - Surface Methods (MPI & PT) OC358 - UV _ Irradiation in NDT: Quo vadis <u>Thomas Schrott</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC452 - Study on the nuclear method used in earthworks quality control of civil infrastructures <u>José Neves</u>	S4 - NDT of Composites OC285 - Imaging of 3D Fiber Architecture in Composites using Ultrasound Computed Tomography <u>Mathias Kersemans</u>
15:50 - 16:10	S1 - Additive Manufacturing OC271 - ADVANCED X-RAY COMPUTED TOMOGRAPHY IN ADDITIVE MANUFACTURING <u>Thomas Hemberger</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC70 - Estimating manufacturing parameters of additively manufactured 316L steel cubes using ultrasound fingerprinting <u>Shafaq Zia</u>	#N/D	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 <u>Klayne Silva</u>	S4 - NDT of Composites OC406 - UT data analysis steps for development of automated detection technique of bonding defects in multi-layered structures <u>Damira Smagulova</u>
16:10 - 16:40	COFFEE-BREAK				
Chairs 16:40 - 17:20	<u>Matthias Pelkner</u> <u>Luís Rosado</u>	<u>Mathias Kersemans</u> <u>Mate Gaal</u>		<u>Mohsen Aghadavoudi Jolfaei</u> <u>José Neves</u>	<u>Sergio González</u> <u>Guenther Mayr</u>
16:40 - 17:00	S1 - Additive Manufacturing OC228 - Non-contact assessment of porosity in metal 3D printed parts by vibration spectra <u>Alexey Tatarinov</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC211 - Ultrasonic C-scan imaging of damage in the quefreny domain <u>Mathias Kersemans</u>	#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 <u>Giuseppe Silipigni</u>	S4 - NDT of Composites OC113 - Ultrasonic representation of photothermal signals to localize and identify foreign object debris in composite materials <u>Guenther Mayr</u>
17:00 - 17:20	S1 - Additive Manufacturing OC273 - NDT for additive manufacturing space hardware qualification <u>Carlos Galleguillos</u>	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC375 - Automated echo separation in scanning acoustic microscopy for testing multi-layered electronic devices <u>Emanuel Leipner</u>	#N/D	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC447 - Ultrasonic Pulse-Echo inspection of backfill grout in segmental tunnel linings <u>Roberto Felicetti</u>	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. <u>Roberto Giacchetta</u>
17:20	WELCOME RECEPTION				

DAY 2 - TUESDAY, 4 JULY 2023

04-Jul-23	SESSION				
TIME	AUDITORIUM II	AUDITORIUM III	AUDITORIUM VI	AUDITORIUM VIII	ROOM 1.08
Chairs 09:00 - 10:40	<u>Xin Tu</u> <u>Bernhard Reitingner</u>		<u>Cheng Liangliang</u> <u>Renaldas Raisutis</u>	<u>Telmo G. Santos</u>	<u>Yuan Yao</u>
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 <u>Ralf Steinhausen</u>	S4 - NDT of Composites OC150 - CREATION AND NON-DESTRUCTIVE CONTROL OF ELECTRIC HEATING ELEMENTS OF THE AIRCRAFT ICING PREVENTION SYSTEM <u>Mykhail Kazakevych</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC78 - Time reversal method applied to leaky Lamb waves in an immersed layered medium <u>Jean-Christophe Vallée</u>	S1 - Additive Manufacturing OC310 - Near Field Microwave Probe for Metal Additive Manufacturing Imaging <u>Luís Rosado</u>	S13 - Numerical Simulation, Modeling and Data Processing OC412 - Numeric Prediction of the Detail Visibility in Industrial X-Ray Computed Tomography by Human Observers <u>Uwe Ewert</u>

09:20 - 09:40	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC256 - Directivity of laser generated ultrasonic waves in thermoelastic regime <u>Xin Tu</u>	S4 - NDT of Composites OC196 - Acoustic material testing a progressive testing method. <u>Jörg Ritter</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC176 - Multi-dimensional data fusion study for ultrasonic and radiographic non-destructive inspections <u>Elena Jasiuniene</u>	S1 - Additive Manufacturing OC205 - Automated Multi-Modal In-Process Non-Destructive Evaluation of Wire + Arc Additive Manufacturing <u>Ehsan Mohseni</u>	S13 - Numerical Simulation, Modeling and Data Processing OC252 - Industrial Radiography simulation with a Monte-Carlo model including full physics <u>Andreas Schumm</u>
09:40 - 10:00	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC81 - Automated laser ultrasound for weld seams <u>Norbert Huber</u>	S4 - NDT of Composites OC91 - Investigation of Kissing Bonds in Adhesive Joints <u>Mike Kornely</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC178 - Inductive arrays for inspection of curved structures <u>Alexis Hernandez</u>	S1 - Additive Manufacturing OC324 - Inline inspection of metal parts produced by Wire and Arc Additive Manufacturing (WAAM) <u>Telmo G. Santos</u>	S13 - Numerical Simulation, Modeling and Data Processing OC301 - Realistic Simulation of CT Systems - An Introduction to The CTSimU2 Project <u>Carsten Bellon</u>
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 <u>So Kitazawa</u>	S4 - NDT of Composites OC382 - A new Defects Detection Method in CFRP with non-contact Lamb Waves Propagation and Wavelet Transform Analysis <u>Lea Lecointre</u>	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 <u>Renaldas Raisutis</u>	S1 - Additive Manufacturing OC337 - Flaw Detection in Wire and Arc Additive Manufacturing Using In-Situ Wide Frequency Bandwidth Acoustic Pressure <u>André Ramalho</u>	S13 - Numerical Simulation, Modeling and Data Processing OC118 - Anomalies detector on industrial radiographies: application on High Pressure Turbine Blades <u>Clément Remacha</u>
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 <u>Bernhard Reitingger</u>	S4 - NDT of Composites OC240 - Nonlinear Guided Wave Damage Imaging in Composite Structures Using A Sparse Sensor Network <u>Yusheng Ma</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC258 - Effect of Object Thickness on Resolution of TDI X-ray Detectors <u>Anthony Dimalanta</u>	S1 - Additive Manufacturing OC441 - Tomosynthesis for large additive manufacturing parts <u>Anne-Françoise Obaton</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>
10:40 - 11:10	COFFEE-BREAK				
Chairs 11:10 - 12:50	<u>Bernhard Reitingger</u> <u>Norbert Huber</u>	<u>Lea Lecointre</u> <u>Johann Kastner</u>	<u>Cheng Liangliang</u> <u>Renaldas Raisutis</u>	<u>Ratislav Zimermann</u>	<u>Yuan Yao</u>
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 <u>Guillaume Cousin</u>	S4 - NDT of Composites OC223 - 3D-characterization of carbon fibre reinforced polymers by Talbot-Lau grating interferometry radioscopia and computed tomography <u>Johann Kastner</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC297 - PAUT and ToFD performance demonstration on HDPE joints <u>Ludovic Pinier</u>	S1 - Additive Manufacturing OC106 - CT-Analysis of the Melting Area in the Fused Filament Fabrication Process <u>Julian Ehrler</u>	S13 - Numerical Simulation, Modeling and Data Processing OC407 - Simulation of Eddy Current Rail Testing Data for Neural Networks <u>Alexander Friedrich</u>
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 <u>Serge dos Santos</u>	S4 - NDT of Composites OC401 - Inspection benchmarking of Fibre Reinforced Polymeric Composites produced by Additive Manufacturing <u>Miguel A. Machado</u>	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 <u>Viswa Ratnasri Sunkavalli</u>	S1 - Additive Manufacturing OC166 - In-process Non-Destructive Evaluation of Wire + Arc Additive Manufacture Components Using Ultrasound High-Temperature Dry-Coupled Roller-Probe <u>Rastislav Zimermann</u>	S13 - Numerical Simulation, Modeling and Data Processing OC34 - Formulation of a Mechanical Stress Dependent Macroscopic Magnetic Model for Incremental Permeability Simulation <u>Patrick Lombard</u>
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 <u>Josef Pörnbacher</u>	S4 - NDT of Composites OC54 - Multi-domain contactless NDI approach: Data fusion of structural light scanning with thermography and shearography <u>Patrick Jansen</u>	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC384 - Thermal stress opening of closed cracks with local cooling on the cracked surface <u>Arthur Perrin</u>	S2 - NDT Industry 4.0 OC83 - Monitoring Barkhausen noise measurements to detect and reduce grinding burn and case depth defects in manufactured parts <u>Kizkitza Gurruchaga</u>	S13 - Numerical Simulation, Modeling and Data Processing OC368 - A Physics-informed Neural Network for Pulsed Thermography- Based Defect Detection <u>Yuan Yao</u>

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				
Chairs 14:10 - 16:10	<u>Mário Santos</u> <u>Jaesun lee</u>	<u>Robert Hughes</u> <u>Gaétan Poelman</u>		<u>Serge dos Santos</u> <u>Arno Volker</u>	<u>Alexander Friedrich</u> <u>Vincent Dorval</u>
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 Rodríguez-Aseguinolaza</u>	S2 - NDT Industry 4.0 OC195 - Using DICONDE for NDT Data Exchange <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>	S2 - NDT Industry 4.0 OC465 - Application of digital transformation for the non-destructive testing of carbon monoxide gas by Gas Chromatography-TCD <u>Talaat Rahali</u>	S2 - NDT Industry 4.0 OC397 - Multipurpose applications of robotic systems in NDT <u>Radek Salač</u>	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				
Chairs	<u>Mário Santos</u>	<u>Ingrid Ullmann</u>		<u>Arno Volker</u>	<u>Alexander Friedrich</u>
16:40 - 18:20	<u>Jaesun Lee</u>	<u>Gaétan Poelman</u>			
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 Recoquilly</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	SESSION				
TIME	AUDITORIUM II	AUDITORIUM III	AUDITORIUM VI	AUDITORIUM VIII	ROOM 1.08
Chairs	<u>Panpan Xu</u>		<u>Masoud Mohammadgholiha</u>	<u>Nuno Mendes</u>	<u>Fabien Lefevre</u>
09:00 - 10:40	<u>Helena Ramos</u>		<u>Gerald Lackner</u>	<u>André Lamarre</u>	<u>Soonho Won</u>

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 NDT 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 - Automated 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				
Chairs 11:10 - 12:50	<u>Helena Ramos</u> <u>Panpan Xu</u>		<u>Masoud Mohammadgholiha</u> <u>Gerald Lackner</u>	<u>Nuno Mendes</u>	<u>Soonho Won</u> <u>Frank Herold</u>
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 NDT 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 Clause</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>Gilles Stevens</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				
Chairs 14:10 - 14:30	<u>Enes Savli</u> <u>Artur Ribeiro</u>	S25 - ACADEMIA NDT INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	<u>Aldo Canova</u> <u>Thomas Wuerschig</u>	<u>Frank Harold</u>	<u>Ion Tiseanu</u>
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>		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 Rasgado Moreno</u>		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 <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>		S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC 317 - OLED Glass Substrates Inspection using Air-coupled Ultrasonic Testing <u>Bonggyu Ji</u>	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 Wuerschig</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>	S2 - NDT Industry 4.0 OC 395 - The AutosonicTM, a system for the full automatic inspection of seamless steel and aluminum gas cylinders industry 4.0 ready. <u>Luca Scaccabarozzi</u>	S11 - Art & Cultural Heritage OC312 - Laminographic Imaging of a Medieval Panel Painting by RoboCT <u>Wolfgang Holub</u>
16:10 - 16:40	COFFEE-BREAK				
Chairs	<u>Enes Savli</u>		<u>Aldo Canova</u>	<u>Frank Harold</u>	
16:40 - 17:20	<u>Artur Ribeiro</u>		<u>Thomas Wuerschig</u>		
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 NDT 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 OC431 - Data processing to analyze health state in X-ray modules <u>Pascal Corbat</u>	#N/D
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 OC 120 - A path towards digital industry: Airblade grains detection by directional reflectance technique <u>Clément Remacha</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 NDT INTERNATIONAL RESEARCH DAY (AIRD)

05-Jul-23 TIME	SESSION AUDITORIUM II	AUDITORIUM III	AUDITORIUM VI	AUDITORIUM VIII	ROOM 1.08
09:00	x	S25 - Academia NDT 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	<p>Experimental evidence of the spin magnetic moment of electron activated by the magnetic field and monitored by acoustic emission</p> <p><u>Giuseppe Nardoni, N. Fallahi, P. Nardoni</u> I&T Nardoni Institute, Italy</p>	x	x	x
10:40 - 11:10	COFFEE-BREAK				
11:10	x	<p>INTERNATIONAL FORUM ON NDT EDUCATION AT UNIVERSITIES</p> <p>Joint meeting of Academia NDT International and ICNDT WG 3</p>	x	x	x
11:10 - 11:20	x	<p>Opening and Welcome</p> <p><u>Younho Cho</u> President of WCNDT 2020 and Chairman of WG 3 of ICNDT, South Korea</p>	x	x	x
11:20 - 11:50	x	<p>NDT Integrity Engineering – The Feasible Curriculum</p> <p><u>Keynote presentation - Peter Trampus 1, Vjera Krstelj 2</u> 1 President of Academia NDT International, Hungary 2 President of Croatian Engineering Association, Croatia</p>	x	x	x
11:50 - 12:10	x	<p>Current Status and Challenges of NDE Education at Academic Institutions in the U.S.A.</p> <p><u>Reza Zoughi</u> Center for Nondestructive Evaluation (CNDE), IOWA State University, U.S.A.</p>	x	x	x
12:10 - 12:30	x	<p>The UK Research Centre for NDE (RCNDE) – Twenty Years of Delivering Value to Industry</p> <p><u>Colin Brett</u> RCNDE, United Kingdom</p>	x	x	x
12:30 - 12:50	x	<p>General Education and Training of NDT Personnel, including NDT Education at Universities in South Africa</p> <p><u>Manfred Johannes</u> Immediate Past President of SAINT, South Africa</p>	x	x	x
12:50 - 14:10	LUNCH				
14:10 - 14:30	x	<p>S25 - Academia International Research Day (AIRD)</p> <p>Experience with an International NDT Master Course in view of Research and Development</p> <p><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</p>	x	x	x

14:30 - 14:50	x	Strategy for NDTE Education at Universities in France <u>Philippe Duvauchelle 1, Rachid El-Guerjouma 2, Serge Dos Santos 3</u> 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 <u>Shant Kenderian</u> The Aerospace Corporation, ASNT Engineering Council, U.S.A.	x	x	x
15:10 - 15:30	x	Development and Practical Exploration of NDT Education at Universities in China <u>Yongshun Xiao</u> Tsinghua University, China	x	x	x
15:30 - 15:50	x	Strategy for NDE Education at Universities in UK: An Integrated Education Programme for NDT Professionals <u>David Gilbert</u> BINDT, United Kingdom	x	x	x
15:50 - 16:10	x	Strategy for NDT Education at Universities in India <u>Krishnan Balasubramaniam</u> IIT, India	x	x	x
16:10 - 16:40	COFFEE-BREAK				
16:40 - 17:10	x	Panel Discussion <u>Shant Kenderian, Younho Cho, Peter Trampus</u> 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	AUDITORIUM II	AUDITORIUM III	AUDITORIUM VI	AUDITORIUM VIII	ROOM 1.08
Chairs	Hakan Wirdelius	Jorge Martinez Garcia	Aldo Canova	Jie Zhang	
09:00 - 10:40	Jaime Santos	John Wilson		Sanjeevareddy Kolkoori	Sergio Gonzalez

09:00 - 09:20	<p>S9 - Guided Waves OC270 - Use of periodic structures for mode transformation in cylindrical objects</p> <p><u>I Boris</u></p>	<p>S5 - Materials Characterization OC3 - HIGH TEMPERATURE MAGNETIC PROPERTIES OF SELECTED STEEL GRADES</p> <p><u>John Wilson</u></p>	<p>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</p> <p><u>Thomas Wuerschig</u></p>	<p>S2 - NDT Industry 4.0 OC 129 - Guided wave ultrasonic feature determination in Type IV composite overwrapped pressure vessels towards the digital twin</p> <p><u>Bengisu Yilmaz</u></p>	<p>S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC245 - Development and adaptation of Ultrasonic system for Windblades inspection using Unmanned Aerial Vehicles</p> <p><u>Sergio González</u></p>
09:20 - 09:40	<p>S9 - Guided Waves OC315 - APPLICATIONS OF LINEAR SCANNING MAGNETOSTRICTIVE TRANSDUCERS (MST) FOR FINDING OF HARD TO DETECT ANOMALIES IN STRUCTURAL COMPONENTS</p> <p><u>Sergey Vinogradov</u></p>	<p>S5 - Materials Characterization OC105 - Non-destructive magnetic evaluation of microstructure and mechanical properties of advanced high-strength steels</p> <p><u>Ane Martinez-de-Guerenu</u></p>	<p>S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC82 - Scanning pulse phase thermography for surface defect detection in manganese steel turnout frogs</p> <p><u>Christoph Tuschl</u></p>	<p>S2 - NDT Industry 4.0 OC53 - Automating 'Image-Based Simulation' with machine learning for virtual quality assurance in industrial applications</p> <p><u>Llion Evans</u></p>	<p>S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC79 - Automated analysis of Baffle Bolts</p> <p><u>Javier De La Morena</u></p>
09:40 - 10:00	<p>S8 - Ultrasound Phased Arrays OC49 - The effect of ultrasound wave path estimation to defect characterization capability in half-skip total focusing method</p> <p><u>Håkan Wirdelius</u></p>	<p>S5 - Materials Characterization OC132 - Heat treatment and residual stress characterization by electromagnetic non-destructive methods</p> <p><u>Hélène Petitpré</u></p>	<p>S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC419 - Experimental evaluation of metallic ropes magnetisation under magneto-inductive testing</p> <p><u>Aldo Canova</u></p>	<p>S12 - Surface Methods (MPI & PT) OC 11 - Mechanized Dye Penetrant Internal Piping inspection system</p> <p><u>Peter Merck</u></p>	<p>S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC24 - Power Plant Condition Assessment through Engineering, Materials Science, and NDT 4.0</p> <p><u>Terry Haigler</u></p>
10:00 - 10:20	<p>S8 - Ultrasound Phased Arrays OC63 - Development of 1024-elements 2D matrix array transducer for high-resolution 3D phased-array imaging in NDE applications</p> <p><u>Yoshikazu Ohara</u></p>	<p>S5 - Materials Characterization OC161 - Magnetic NDT of the Microstructure of Steels for Oil and Gas Applications</p> <p><u>Alasdair Regan</u></p>	<p>S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC350 - How to Reach 100% Inspection Coverage of Aeroengine Fan Blades with a High Probability of Detection</p> <p><u>Etienne Grondin</u></p>	<p>S3 - Robotics and Automation OC169 - Strategies for pipeline inspection using mobile robots</p> <p><u>Jie Zhang</u></p>	<p>S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation) OC282 - Eddy current response from copper tube extrusion laps compared to artificial notches</p> <p><u>Barend Van Den Bos</u></p>
10:20 - 10:40	<p>S8 - Ultrasound Phased Arrays OC251 - Innovative Instrument Platforms for Ultrasonic Inspections</p> <p><u>Johannes Buechler</u></p>	<p>S5 - Materials Characterization OC172 - Advances in Automated Eddy-Current Characterisation of Carbon Fibre Composites</p> <p><u>Qiuji Yi</u></p>	<p>S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC29 - Inspection of vaporizers and recuperators in Binary Cycle Geo Thermal Power plant</p> <p><u>Vignesh Sivanandam</u></p>	<p>S3 - Robotics and Automation OC413 - DEKRA Robotized Inspection of Hazardous Areas</p> <p><u>Thomas Czogalla</u></p>	<p>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</p> <p><u>Florin Turcu</u></p>
10:40 - 11:10	COFFEE-BREAK				
Chairs	<u>Hakan Wirdelius</u>			<u>Jie Zhang</u>	
11:10 - 12:50	<u>Jaime Santos</u>	<u>Jorge Martinez Garcia</u>	<u>Patrick Huot</u>	<u>Sanjeevareddy Kolkoori</u>	
11:10 - 11:30	<p>S8 - Ultrasound Phased Arrays OC267 - Assessing the roughness of surfaces with ultrasound arrays</p> <p><u>Thiago A. R. Passarin</u></p>	<p>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?</p> <p><u>Viktor Lyamkin</u></p>	<p>S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC23 - Process safe automatic evaluation for fast Inline-CT systems</p> <p><u>Tobias Schön</u></p>	<p>S3 - Robotics and Automation OC7 - Quantitative Measurement and Evaluation of High-Resolution Ultrasonic Sound Fields using a Novel Automated Ultrasonic Immersion Scanner</p> <p><u>Sanjeevareddy Kokoori</u></p>	<p>S18 - Oil & Gas OC296 - Performance demonstration of AUT Pipeline girth welds using simulation and the new CIVA AUT Pipeline software</p> <p><u>Stéphane Le Berre</u></p>
11:30 - 11:50	<p>S8 - Ultrasound Phased Arrays OC43 - Low Frequency GFRP Imaging with Variable Aperture TFM</p> <p><u>Renato Nogueira</u></p>	<p>S5 - Materials Characterization OC402 - Microchannels produced by Friction Stir Channeling: characterisation with non-destructive testing techniques</p> <p><u>Miguel A. Machado</u></p>	<p>S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC33 - Unsupervised deep learning for defect detection on CT parts using simulated data</p> <p><u>Virginia Florian</u></p>	<p>S3 - Robotics and Automation OC114 - Innovations in ultrasonic inspection of forged rings</p> <p><u>Tobias Gautzsch</u></p>	<p>S18 - Oil & Gas OC330 - Reducing False Calls in HTHA Inspection through Phase Coherence Imaging (PCI)</p> <p><u>Florin Turcu</u></p>

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>Roy Olivier</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				
Chairs 14:10 - 16:10	<u>Pavel Mares</u>	<u>John Wilson</u>	<u>Robert Hughes</u>	<u>Michel Brassard</u>	
	<u>Bengisu Ylmaz</u>	<u>Arno Volker</u>			
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>Andreanne Potvin</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 Wuerschig</u>	#N/D
16:10 - 16:40	COFFEE-BREAK				
Chairs 16:40 - 18:20	<u>Pavel Mares</u> <u>Bengisu Ylmaz</u>		<u>Robert Hughes</u> <u>Jules Lecomagnon</u>	<u>Uwe Zscherpel</u> <u>Rafael Martinez-Oña</u>	
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>Jorge Martinez Garcia</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>	#N/D
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>	#N/D
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>	#N/D
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>	#N/D
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 <u>Jan Heimann</u>	#N/D	S23 - NDT Reliability and Statistic OC272 - A POD approach by simulation of an industrial ultrasonic inspection <u>Benoit Dupont</u>	#N/D

DAY 5 - FRIDAY, 7 JULY 2023

07-Jul-23 TIME	SESSION AUDITORIUM II	AUDITORIUM III	AUDITORIUM VI	AUDITORIUM VIII	ROOM 1.08
Chairs 09:00 - 10:40	<u>Sumana Sumana</u> <u>Guillermo Cosarinsky</u>	<u>Christophe Reboud</u> <u>Valentyn Uchanin</u>		<u>Beate Oswald-Tranta</u>	
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>	#N/D
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>	#N/D
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>	#N/D
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	#N/D
10:40 - 11:10	COFFEE-BREAK				
Chairs 11:10 - 12:30	<u>Guillermo Cosarinsky</u>		Joint EFNDT-ICNDT Workshop: Training, Qualification and Certification – the new 9712 and more	<u>Thomas Wuerschig</u> <u>Fabrice Foucher</u>	
11:10 - 11:30	S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u>	#N/D		S23 - NDT Reliability and Statistic OC216 - Introduction of a certification procedure for the acoustic response of reference reflectors for ultrasonic testing <u>Thomas Wuerschig</u>	#N/D
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>	#N/D
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	#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		#N/D	#N/D
12:30 - 13:30	x	x		x	CLOSING CEREMONY
	x	x	x	<u>Bento Alves</u> President, ECNDT 2023	x

	x	x	x	<u>Telmo G. Santos</u> Full Professor, NOVA School of Science and Technology	x
	x	x	x		<u>Fermín Gómez Fraile</u> President, EFNDT
13:30 - 14:30	LUNCH				
14:30	CLOSING				

DAY 5 - FRIDAY, 7 JULY 2023 / EFNDT-ICNDT WORKSHOP: TRAINING, QUALIFICATION AND CERTIFICATION

07-Jul-23 TIME	SESSION AUDITORIUM II	AUDITORIUM III	AUDITORIUM VI	AUDITORIUM VIII	ROOM 1.08
08:30 - 08:40	x	x	Joint EFNDT-ICNDT Workshop: Training, Qualification and Certification – the new 9712 and more Opening Remarks <u>Sajeesh K. Babu</u> , Chair - ICNDT <u>Fermín Gomez Fraile</u> , President - EFNDT	x	x
08:40 - 09:00	x	x	Implementation of SGNDDT ISO 9712: 2021 by NDTSS in Singapore, Challenges & Success <u>Sajeesh K. Babu</u> NDTSS	x	x
09:00 - 09:20	x	x	Implementation of BS EN ISO 9712: 2022 by BINDT <u>Jennifer Cook</u> BINDT	x	x
09:20 - 09:40	x	x	EFNDT – ICNDT drive for quality of Certification and Qualification <u>Harold Jansen</u> ICNDT	x	x
09:40 - 10:00	x	x	ICNDT Guide update <u>Mike Farley</u> ICNDT	x	x
10:00 - 10:20	x	x	EFNDT Certification update <u>Thomas Wenzel</u> EFNDT	x	x
10:20 - 10:40	x	x	EN4179/NAS 410: Qualification and Certification in Aerospace <u>Fermín Gomez Fraile</u> EFNDT	x	x
10:40 - 11:10	COFFEE-BREAK				

11:10 - 11:30	x	x	ASNT-9712 <u>David Bajula</u> ASNT	x	x
11:30 - 11:50	x	x	The Pressure Equipment Regulations: Great Britain <u>Mark Dowell</u> BINDT	x	x
11:50 - 12:10	x	x	Discussion & Closing remarks	x	x
12:10 - 12:30	x	x	x	x	x
12:30 - 13:30	x	x	x	x	x
13:30 - 14:30	LUNCH				
14:30	CLOSING				

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>
	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>
	S20 - Green & Echo Technology P30 - Evaluation of glycerol speed of sound <u>Jaime Batista Santos</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>	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	S1 - Additive Manufacturing
S2	S2 - NDT Industry 4.0
S3	S3 - Robotics and Automation
S4	S4 - NDT of Composites
S5	S5 - Materials Characterization
S6	S6 - Microwave, Terahertz, and Infrared
S7	S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear)
S8	S8 - Ultrasound Phased Arrays
S9	S9 - Guided Waves
S10	S10 - Micro & Nano Technology and High-Resolution NDT
S11	S11 - Art & Cultural Heritage
S12	S12 - Surface Methods (MPI & PT)
S13	S13 - Numerical Simulation, Modelling and Data Processing
S14	S14 - Transportation (Railway, Automotive, Marine, Aerospace)
S15	S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis)
S16	S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials
S17	S17 - Energy Generation (Fossil, Nuclear and Regenerative Power Generation)
S18	S18 - Oil & Gas
S19	S19 - Biomedical Technology
S20	S20 - Green & Echo Technology
S21	S21 - Food & Agriculture
S22	S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination)
S23	S23 - NDT Reliability and Statistic
S24	S24 - Qualification, certification, standards and training
S25	S25 - Academia International Research Day (AIRD)

LEGEND:

S	Session of the Conference Topic
OC	Oral Communication
P	Poster