

DAY 1 - 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	Additive Manufacturing Defect Detection in Additively Manufactured Parts by Laser Ultrasound Tomography <u>Bernhard Reitingner</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Multi-functional ultrasound phased array imaging <u>Choon-su Park</u>	Surface Methods (MPI & PT) Bio Water Based Liquid Penetrants and Magnetics: a safer and cost-efficient solution for the future <u>Michele Cevenini</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Modelling Crystallographic Texture Evaluation and Non-Destructive Measurement of Magnetic Anisotropy using an Electromagnetic Sensor in Interstitial Free (If) Steels <u>Mohsen Aghadavoudi Jolfaei</u>	NDT of Composites Ultrasonic Inspection for aging monitoring of GFRP composites <u>Marcella Grosso</u>	#N/D
14:30 - 14:50	Additive Manufacturing Inspection of Additive manufacturing parts, study of NDT solutions for WAAM <u>Fabien Lefevre</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Phased array probes for air-coupled ultrasonic testing based on cellular polymer <u>Mate Gaal</u>	Surface Methods (MPI & PT) Mechanized Dye Penetrant Internal Piping inspection system <u>Peter Merck</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Active Infrared Thermography applied for concrete structures inspection in Nuclear Power Plants <u>Javier De La Morena</u>	NDT of Composites MEMS-sensor array for non-contact ultrasonic composite panel inspection <u>Arno Volker</u>	#N/D
14:50 - 15:10	Additive Manufacturing Online eddy current testing of PBF-LB/M parts using GMR sensor arrays during manufacturing <u>Matthias Pelkner</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Thermoacoustic phased-array radiators – Theory, characteristics, and applications <u>Daniel Hufschläger</u>	Surface Methods (MPI & PT) UV-A LED's in fluorescent penetrant testing and magnetic particle testing <u>Jesko Klippstein</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Advanced Eddy Current Testing of Carbon Composites <u>Marie Rudolfova</u>	NDT of Composites Air-coupled Ultrasonic Inspection of Thermoplastic Composite Structures for Aerospace Vehicles <u>Armin Huber</u>	#N/D
15:10 - 15:30	Additive Manufacturing Multi-physics data registration for the improvement of Additive Manufacturing process control <u>Jitendra Singh Rathore</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Phased-Array Approach to Air-coupled Ultrasound with Resonant Defect Excitation <u>Yannick Bernhardt</u>	Surface Methods (MPI & PT) Development of an Automatic magnetic particle flaw detector System Using Deep Learning <u>Daisuke Nagata</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Validation through field data of LineCore, a lightweight Eddy-current sensor for the early detection of corrosion of ACSRs <u>Nicolas Pouliot</u>	NDT of Composites Ad-hoc solutions for ultrasonic inspection of highly complex aircraft composite structures <u>Sergio González</u>	#N/D
15:30 - 15:50	Additive Manufacturing INDUSTRIAL APPLICATION OF HIGH ENERGY CT <u>Eberhard Neuser</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Ultrasonic C-scan imaging of damage in the quefreny domain <u>Xiaoyu Yang</u>	Surface Methods (MPI & PT) UV _ Irradiation in NDT: Quo vadis <u>Thomas Schrott</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Study on the nuclear method used in earthworks quality control of civil infrastructures <u>José Neves</u>	NDT of Composites Imaging of 3D Fiber Architecture in Composites using Ultrasound Computed Tomography <u>Mathias Kersemans</u>	#N/D
15:50 - 16:10	Additive Manufacturing ADVANCED X-RAY COMPUTED TOMOGRAPHY IN ADDITIVE MANUFACTURING <u>Gerhard Zacher</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Estimating manufacturing parameters of additively manufactured 316L steel cubes using ultrasound fingerprinting <u>Shafaq Zia</u>	Green & Echo Technology Work safety in magnetic particle and penetrant testing <u>Kersten Alward</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Linear and Non-Linear Resonant Ultrasonic Testing for the Early Detection of Alkali-Silica Reaction in Concrete <u>Klayne Silva</u>	NDT of Composites UT data analysis steps for development of automated detection technique of bonding defects in multi-layered structures <u>Damira Smagulova</u>	#N/D
16:10 - 16:40	COFFEE-BREAK					
16:40 - 17:00	Additive Manufacturing Non-contact assessment of porosity in metal 3D printed parts by vibration spectra <u>Alexey Tatarinov</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Non-Destructive Testing of Battery Pouches with Imaging Ultrasonic Techniques <u>Artur Szewieczek</u>	#N/D	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Ultrasonic Phased Array application for the detection of discrepancy on laser welding <u>Giuseppe Silipigni</u>	NDT of Composites Ultrasonic representation of photothermal signals to localize and identify foreign object debris in composite materials <u>Guenther Mayr</u>	#N/D
17:00 - 17:20	Additive Manufacturing NDT for additive manufacturing space hardware qualification <u>Carlos Galleguillos</u>	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Automated echo separation in scanning acoustic microscopy for testing multi-layered electronic devices <u>Emanuel Leipner</u>	#N/D	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Ultrasonic Pulse-Echo inspection of backfill grout in segmental tunnel linings <u>Roberto Felicetti</u>	NDT of Composites 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>	#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	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Online quality monitoring in the production of organo sheets by air-coupled ultrasonic testing <u>Ralf Steinhausen</u>	NDT of Composites CREATION AND NON-DESTRUCTIVE CONTROL OF ELECTRIC HEATING ELEMENTS OF THE AIRCRAFT ICING PREVENTION SYSTEM <u>Mykhail Kazakevych</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Time reversal method applied to leaky Lamb waves in an immersed layered medium <u>Jean-Christophe Vallée</u>	Additive Manufacturing Near Field Microwave Probe for Metal Additive Manufacturing Imaging <u>Luís Rosado</u>	Numerical Simulation, Modeling and Data Processing Numeric Prediction of the Detail Visibility in Industrial X-Ray Computed Tomography by Human Observers <u>Uwe Ewert</u>
09:20 - 09:40	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Directivity of laser generated ultrasonic waves in thermoelastic regime <u>Xin Tu</u>	NDT of Composites Acoustic material testing a progressive testing method. <u>Jörg Ritter</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Multi-dimensional data fusion study for ultrasonic and radiographic non-destructive inspections <u>Elena Jasiuniene</u>	Additive Manufacturing Automated Multi-Modal In-Process Non-Destructive Evaluation of Wire + Arc Additive Manufacturing <u>Ehsan Mohseni</u>	Numerical Simulation, Modeling and Data Processing Industrial Radiography simulation with a Monte-Carlo model including full physics <u>Andreas Schumm</u>
09:40 - 10:00	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Automated laser ultrasound for weld seams <u>Norbert Huber</u>	NDT of Composites Investigation of Kissing Bonds in Adhesive Joints <u>Mike Kornely</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Inductive arrays for inspection of curved structures <u>Alexis Hernandez</u>	Additive Manufacturing Inline inspection of metal parts produced by Wire and Arc Additive Manufacturing (WAAM) <u>Telmo G. Santos</u>	Numerical Simulation, Modeling and Data Processing Realistic Simulation of CT Systems - An Introduction to The CTSimU2 Project <u>Carsten Bellon</u>
10:00 - 10:20	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Noncontact measurement of bolt axial force during tightening processes using scattered laser ultrasonic waves <u>So Kitazawa</u>	NDT of Composites A new Defects Detection Method in CFRP with non-contact Lamb Waves Propagation and Wavelet Transform Analysis <u>Lea Lecointre</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Defect detection and sizing in components of the energy sector based on phase velocity variation of ultrasonic guided waves <u>Renaldas Raisutis</u>	Additive Manufacturing Flaw Detection in Wire and Arc Additive Manufacturing Using In-Situ Wide Frequency Bandwidth Acoustic Pressure <u>André Ramalho</u>	Numerical Simulation, Modeling and Data Processing Anomalies detector on industrial radiographies: application on High Pressure Turbine Blades <u>Clément Remacha</u>
10:20 - 10:40	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Combination of laser ultrasonics and thermography for enhanced defect characterization in CFRP parts <u>Bernhard Reitingner</u>	NDT of Composites Nonlinear Guided Wave Damage Imaging in Composite Structures Using A Sparse Sensor Network <u>Yusheng Ma</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Effect of Object Thickness on Resolution of TDI X-ray Detectors <u>Anthony Dimalanta</u>	Additive Manufacturing Tomosynthesis for large additive manufacturing parts <u>Anne-françoise Obaton</u>	Numerical Simulation, Modeling and Data Processing Improvement of radiographic images quality using algorithms dedicated to geometric blur reduction <u>Nezha MAMOUNI</u>
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Assessment of metallurgical properties on moving steel strips at high temperature with laser ultrasonics <u>Guillaume Cousin</u>	NDT of Composites 3D-characterization of carbon fibre reinforced polymers by Talbot-Lau grating interferometry radioscopy and computed tomography <u>Johann Kastner</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials PAUT and ToFD performance demonstration on HDPE joints <u>Ludovic Pinier</u>	Additive Manufacturing Investigation of the Melting Process in the Hot End of a Fused Filament Fabrication 3D Printer by Means of X-Ray Computed Tomography <u>Julian Ehrler</u>	Numerical Simulation, Modeling and Data Processing Simulation of Eddy Current Rail Testing Data for Neural Networks <u>Alexander Friedrich</u>
11:30 - 11:50	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) 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>	NDT of Composites Inspection benchmarking of Fibre Reinforced Polymeric Composites produced by Additive Manufacturing <u>Miguel A. Machado</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Material Characterisation of Polyamide using Fluidic Oscillator as a Frequency Modulated Air-Coupled Ultrasonic Transducer <u>Viswa Ratnasri Sunkavalli</u>	Additive Manufacturing In-process Non-Destructive Evaluation of Wire + Arc Additive Manufacture Components Using Ultrasound High-Temperature Dry-Coupled Roller-Probe <u>Rastislav Zimmermann</u>	Numerical Simulation, Modeling and Data Processing Formulation of a Mechanical Stress Dependent Macroscopic Magnetic Model for Incremental Permeability Simulation <u>Patrick Lombard</u>
11:50 - 12:10	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Robot-ready spot- and seam weld testing based on laser excitation and air-coupled detection of ultrasound <u>Josef Pörnbacher</u>	NDT of Composites Multi-domain contactless NDI approach: Data fusion of structural light scanning with thermography and shearography <u>Patrick Jansen</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Thermal stress opening of closed cracks with local cooling on the cracked surface <u>Arthur Perrin</u>	NDT Industry 4.0 Monitoring Barkhausen noise measurements to detect and reduce grinding burn and case depth defects in manufactured parts <u>Kizkitza Gurruchaga</u>	Numerical Simulation, Modeling and Data Processing A Physics-informed Neural Network for Pulsed Thermography-Based Defect Detection and Parameter Estimation <u>Yuan Yao</u>
12:10 - 12:30	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Tensile properties estimation of aluminum alloys using deep learning-based ultrasonic testing <u>Kyung-young Jhang</u>	NDT of Composites Automated woven background removal for enhanced infrared thermographic inspection of composites <u>Gaétan Poelman</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials 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>	NDT Industry 4.0 A Machine Learning Based-Guided Wave Approach for Damage Detection and Assessment in Composite Overwrapped Pressure Vessels <u>Amir Charmi</u>	Numerical Simulation, Modeling and Data Processing Spatial resolution in photothermal and photoacoustic imaging <u>Peter Burgholzer</u>

12:30 - 12:50	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) A study on the nonlinear correlation between viscoelasticity and guided ultrasound <u>Younho Cho</u>	NDT of Composites Porosity in Carbon Fiber laminate part. Porosity coupons for the evaluation of the percentage voids volume. <u>Valter Capitani</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Modern corrosion mapping of storage tank bottoms – notable advancements in critical zone coverage, inspection efficiency and data integrity. <u>Andrew Simpson</u>	NDT Industry 4.0 Laser ultrasonics for online monitoring of microstructures in the hot strip mill <u>Mikael Malmström</u>	Numerical Simulation, Modeling and Data Processing A WebGPU-based acoustic wave simulator for ultrasound NDT <u>Thiago A. R. Passarin</u>
12:50 - 14:10	LUNCH				
14:10 - 14:30	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Self-calibrating SAFT algorithm for the inspection of electronic devices using scanning acoustic microscopy <u>Mario Wolf</u>	NDT of Composites Computed tomography investigations of 3D aluminum-GMT hybrid profiles manufactured by compression molding <u>Manel Ellouz</u>	NDE & NDT of Civil Infrastructure, Structural Engineering and Materials Quantitative analysis of delaminations by means of lock-in infrared thermography <u>Javier Rodríguez-Aseguinolaza</u>	NDT Industry 4.0 Using DICONDE for NDT Data Fusion <u>Geo Jacob</u>	Numerical Simulation, Modeling and Data Processing Using Perfectly Matched Layer in a GPU simulation of ultrasound NDT <u>Thiago A. R. Passarin</u>
14:30 - 14:50	Biomedical Technology Modelling of an ultrasound-based system for cataract detection and classification <u>Mário Santos</u>	NDT of Composites Defect-aware Super-resolution Thermography by Adversarial Learning <u>Cheng Liangliang</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Working Smart Using Wireless UT Sensors for Asset Integrity Monitoring <u>Steve Strachan</u>	NDT Industry 4.0 Reduction of rejects by combining data from the casting process and automatic X-ray inspection <u>Thomas Stocker</u>	Numerical Simulation, Modeling and Data Processing Determining ultrasonic propagation effective properties in complex heterogeneous media through microstructure-scale simulation <u>Vincent Dorval</u>
14:50 - 15:10	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager <u>Michael Kaack</u>	NDT of Composites RoboCT - Robot based Micro-CT of full size Composite Aerostructures <u>Wolfgang Holub</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Self-sensing metallic material based on piezoelectric particles <u>Pedro Ferreira</u>	NDT Industry 4.0 In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor <u>Fanfu Wu</u>	Numerical Simulation, Modeling and Data Processing 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	Guided Waves A study on the wave propagation on weld joints by the use of feature-guided wave mixing <u>Jaesun Lee</u>	NDT of Composites X-ray Computed Tomography Inspection of Novel Ceramic Matrix Composites <u>Nick Brierley</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Identification of overloads on splined shafts by means of eddy current testing technology <u>René Gansel</u>	NDT Industry 4.0 On the use of inline phase transformation sensors in a hot strip mill: a case study <u>Haibing Yang</u>	Numerical Simulation, Modeling and Data Processing 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	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) IN-SERVICE OIL REFINERIES STORAGE TANK INSPECTION WITH GUIDED WAVES. <u>Levente Bazsanyi</u>	NDT of Composites NDT & METROLOGY – Improving Efficiency in Aerospace Manufacturing utilizing the Multi-Modality Approach <u>Thomas Gramberger</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) A low-cost ultrasonic array for long-term and high-resolution localised monitoring <u>Xiaoyu Sun</u>	NDT Industry 4.0 HIGH TEMPERATURE CHARACTERISATION OF THE STIFFNESS MATRIX OF DIFFERENT STEELS <u>Arno Volker</u>	Guided Waves 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	Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) Detection of barely visible impact damage in composite plates using non-linear pump-probe technique <u>Guillemette Ribay</u>	NDT of Composites Developing in-line inductive probes for carbon fibre composite manufacturing <u>Robert Hughes</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Experimental evidence of spin electron magnetic moment vibration activated with the magnetic field and monitored by acoustic emission <u>Giuseppe Nardoni</u>	#N/D	Numerical Simulation, Modeling and Data Processing Comparison of grain structure models for wave propagation analysis in centrifugally cast stainless steel <u>Masaki Nagai</u>
16:10 - 16:40	COFFEE-BREAK				
16:40 - 17:00	Guided Waves Deep learning algorithms for design of periodic structures and dispersion curves calculation <u>Kseniia Barashok</u>	Microwave, Terahertz, and Infrared Non-destructive testing of fiber-reinforced composites by terahertz method <u>Waldemar Swiderski</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Infrared Thermography testing during the welding process <u>Sébastien Saint Yves</u>	NDT Industry 4.0 Automated Spot Weld Testing using a Smart Robotic System <u>York Oberdoerfer</u>	Numerical Simulation, Modeling and Data Processing AI-based and model assisted diagnostic for ultrasonic TFM weld inspection <u>Stéphane Le Berre</u>
17:00 - 17:20	Guided Waves Guided Wave-based Structural Health Monitoring for a Composite Aircraft Fuselage under Mechanical Load <u>Maria Moix-Bonet</u>	Microwave, Terahertz, and Infrared Improvement of 3D-Active Thermography by using Artificial Intelligence <u>Marc Kreutzbruck</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Quantitative visual vibrometry for defect detection. <u>Lucy Dougill</u>	NDT Industry 4.0 Easy to go and innovative validation process using the spot weld inspection system PHASIS and related software <u>Philipp Poltersdorf</u>	Numerical Simulation, Modeling and Data Processing Automated honeycomb detection during Impact Echo inspections using AI trained by simulation data <u>Fabian Dethof</u>
17:20 - 17:40	Guided Waves Passive guided wave tomography for monitoring corrosion in pipes <u>Arnaud Recoquillay</u>	Microwave, Terahertz, and Infrared Combining radar and ultrasound imaging for surface echo compensation and augmented visibility of interior structures in NDT applications <u>Ingrid Ullmann</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Vibrational NDT with Under-sampled Data through Physics-informed Neural Networks <u>Saeid Hedayatrasa</u>	NDT Industry 4.0 FebUS - Development and application of the latest technologies in the UT-NDT field <u>Damiano Sallemi</u>	Numerical Simulation, Modeling and Data Processing THICKNESS MEASUREMENT FOR METALLIC LAMINATES: AN ACCURATE METHOD FOR INDUSTRIAL APPLICATIONS <u>Antonello Tamburrino</u>

17:40 - 18:00	Guided Waves 24/7 Large Area Corrosion Monitoring <u>Thomas Voght</u>	Microwave, Terahertz, and Infrared Some practical NDE and QC Applications of Time Domain Terahertz Technology <u>Joe Buckley</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Sensitivity study of tuned Lamb wave excitation with an embedded Lead Zirconate Titanate transducer in composite laminates <u>Nina Kergosien</u>	NDT Industry 4.0 Knowledge sharing as a central idea of NDT 4.0 <u>Tamara Diederichs</u>	Numerical Simulation, Modeling and Data Processing Custom Transient Finite Element Method and Ray Tracing Hybridization Strategies for Ultrasonic Testing Modelling <u>Edouard Demaldent</u>
18:00 - 18:20	Guided Waves Detection and Measurement of Pitting Corrosion using Short Range Guided Wave Scanning <u>Sam Horne</u>	Microwave, Terahertz, and Infrared Field Applications for Multi-Frequency Microwave Imaging <u>Terry Haigler</u>	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Damage Monitoring of Buried Pipelines under Harsh Noise Environment using Low Frequency Acoustic Emission Analysis <u>Sun-Ho Lee</u>	NDT Industry 4.0 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>	NDT of Composites Modelling low-frequency vibration response and defect detection in homogeneous solids and honeycomb composite panels <u>Joshua Aigbotsua</u>

DAY 3 - 5 JULY 2023

05-Jul-23 TIME	SESSION ROOM 2	ROOM 3	ROOM 6	ROOM 8	ROOM 1.08
09:00 - 09:20	Numerical Simulation, Modeling and Data Processing A generic numerical solver for modeling the influence of stress conditions on guided wave propagation for SHM applications <u>André Dalmora</u>	ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) SHM of wire- breakage in concrete bridges by Acoustic Emission Technique <u>Horst Trattnig</u>	NDT Industry 4.0 Platform for ultrasonic data management and evaluation <u>Iratxe Aizpurua</u>	Oil & Gas Development of HOIS guidance for ultrasonic NDT for non-intrusive inspection at elevated temperatures <u>Helen Peramatzis</u>
09:20 - 09:40	Guided Waves Lamb Wave Mode Conversion Analysis for Crack Assessment <u>Artur Ribeiro</u>		Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Automatized Scaling Monitoring in Pipelines with Acoustic Resonance Testing <u>Isabelle Stüwe</u>	NDT Industry 4.0 Automated adaptive TFM method for gas turbine testing in NDE 4.0 Christian Hassenstein	Oil & Gas Field inspection of steel pipes using automatic UT <u>Raphaël Michel</u>
09:40 - 10:00	Guided Waves 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>		Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Frequency Steerable Acoustic Transducers for Guided Waves-based Structural Health Monitoring <u>Masoud Mohammadgholiha</u>	NDT Industry 4.0 Transforming Ultrasonic Inspection Data Management through Cloud-Based Solutions <u>André Lamarre</u>	Oil & Gas Ultrasonic inspection of "shaped pipes" <u>Fabien LEFEVRE</u>
10:00 - 10:20	Guided Waves A Realistic 'digital twin' for guided wave SHM of pipelines <u>Panpan Xu</u>		Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Acoustic non-destructive testing of UAV's propellers during predeparture and post-flight checks <u>Maria Soria Gomez</u>	NDT Industry 4.0 Production Integrated CT Inspection Process <u>Alexander Suppes</u>	Oil & Gas Virtual encoder: a two-dimension visual odometer for NDT <u>Thiago A. R. Passarin</u>
10:20 - 10:40	Guided Waves Development of a digital twin for generating realistic ultrasonic guided wave signals <u>Vivek Nerlikar</u>		Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) An Acoustic Emission IoT Device for Wind Turbine Rotor Blade Condition Monitoring <u>Valery Godinez-Azcuaga</u>	NDT Industry 4.0 Magneto-Optic Screening Technology for Integrity Monitoring of Pipelines <u>Carlos Gouveia</u>	Oil & Gas Detection and Characterisation of Hydrogen-Induced Cracking using ultrasonic NDT inspection techniques <u>Peter Merck</u>
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	Guided Waves Impact localization in composite structures with guided wave and 1D convolutional neural network <u>Bo Feng</u>	ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) NDE & Sensing Solutions for Pipeline Structural Health Monitoring <u>Carlos Gouveia</u>	NDT Industry 4.0 Numerical study of the Line Scan InfraRed Thermography (LST-IR) to optimize the inspection of aircraft structures <u>Ludovic Gaverina</u>	Oil & Gas Evaluation and Simulation of HTHA Damaged Specimen using UT Advanced Techniques <u>Bastien Clausse</u>
11:30 - 11:50	Guided Waves Guided waves defect interaction coefficients obtained through image-based models <u>Daniel Lozano</u>		Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) Guided waves based SHM system for rail monitoring and its environmental impact <u>Bastien Chapuis</u>	NDT Industry 4.0 Automatic defect detection in fiber-reinforced polymer matrix composites using thermographic vision data <u>Nuno Mendes</u>	Oil & Gas Phased Array Ultrasonic Testing for Inspection of LNG Storage Tank <u>Soonho Won</u>

11:50 - 12:10	Guided Waves On the development of a model-assisted design procedure of guided wave-based SHM systems <u>Enes SAVLI</u>		Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) 24/7 monitoring on metallic pressure equipment, storage tanks and infrastructure components with acoustic emission <u>Gerald Lackner</u>	NDT Industry 4.0 Applications of Deep Learning in NDE <u>Ryan Scott</u>	Oil & Gas Latest Developments in the Hardspot Inspection of heavy plates <u>Gerald Schneibel</u>
12:10 - 12:30	Numerical Simulation, Modeling and Data Processing Detection of flaws in austenitic stainless steel plate using eddy current testing <u>Lian Xie</u>		Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) CORROSION BASED DEFECT DETECTION AND CLASIFICATION IN PIPE WALL USING MULTIPLE HIGH ORDER ULTRASONIC GUIDED WAVE MODES <u>Donatas Cirtautas</u>	NDT Industry 4.0 Automatic defect recognition on parts after MPI and FPI <u>Radek Salac</u>	Oil & Gas Low-cost tool for identifying illegal tapping used for fuel theft <u>Lucas Braga Campos</u>
12:30 - 12:50	Numerical Simulation, Modeling and Data Processing Leveraging Signal Correlation for a Multi-variable Model Assisted PoD of Flaws in Eddy Current NDT <u>Prashanth Baskaran</u>		Transportation (Railway, Automotive, Marin, Aerospace) Reliable detection of stick welds at resistance spot welding <u>Christian Mathiszik</u>	NDT Industry 4.0 An analysis of how a software platform can achieve complete digital transformation using Radiographic Testing as an example <u>Lea Köhler</u>	Oil & Gas Development of Non-destructive Testing Method for Tube Inspection in Fin-Fan Coolers in Kazakhstan's Oil/Gas, Chemical and Power Industries. <u>John Hansen</u>
12:50 - 14:10	LUNCH				
14:10 - 14:30	Guided Waves Addressing non-uniqueness for the tomographic reconstruction of wall thickness loss in pipelines. <u>Emiel Hassefras</u>	ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	Transportation (Railway, Automotive, Marin, Aerospace) Adaptive ultrasonic rail wheel testing system utilizing customized data processing <u>Thomas Würschig</u>	NDT Industry 4.0 NDE and Deep Learning: Fashion Trend or the Future? <u>Roman Maev</u>	Oil & Gas A data-driven method for the correction of optical distortions of depth cameras in immersion NDT <u>Thiago A. R. Passarin</u>
14:30 - 14:50	Guided Waves Numerical Assessment of Guided Wave Tomography in a Pipe Bend Based on Full Waveform Inversion <u>Carlos Omar Rasgado Moreno</u>		Transportation (Railway, Automotive, Marin, Aerospace) Innovative concept enables higher sensitivities in ultrasonic testing of railroad wheels <u>Andreas Knam</u>	NDT Industry 4.0 Strategy for NDTE education at universities in France <u>Serge Dos Santos</u>	Oil & Gas Reducing False Calls in HTHA Inspection through Phase Coherence Imaging (PCI) <u>Florin Turcu</u>
14:50 - 15:10	Guided Waves Enhancement and comparison of tomographic reconstruction images in plate-like structures of aircrafts for SHM application using guided waves <u>Aadhik Asokkumar</u>		Transportation (Railway, Automotive, Marin, Aerospace) Advanced 3D-TFM Ultrasonic Spot-Weld Inspection <u>Tobias Bruch</u>	NDT Industry 4.0 Advanced machine learning for dissimilar metal weld phased array ultrasonic inspection <u>Tuomas Koskinen</u>	Oil & Gas Applying Artificial Intelligence (AI) in Digital Radiography <u>Lennart Schulenburg</u>
15:10 - 15:30	Guided Waves Damage imaging and wavenumber mapping for inspection of bonded CFRP plates using ultrasonic guided waves <u>Mohsen Barzegar</u>		Transportation (Railway, Automotive, Marin, Aerospace) Assessment of residual stresses in railway rails using ultrasonic and Barkhausen noise techniques <u>Young-In Hwang</u>	NDT Industry 4.0 NDE 4.0 – Digital Transformation of NDE <u>Lennart Schulenburg</u>	Oil & Gas Performance demonstration of AUT Pipeline girth welds using simulation and the new CIVA AUT Pipeline software <u>Stéphane Le Berre</u>
15:30 - 15:50	Guided Waves Inspection of CFRP Aircraft Components using Guided Wavefield Imaging in Wavenumber-Frequency domain <u>Mathias Kersemans</u>		Transportation (Railway, Automotive, Marin, Aerospace) In-Service Ultrasonic Wheel Inspection thought beyond - New Generation with Focus on improved Ergonomics, Digitalization and Operator Support <u>Benedikt von Kirchbach</u>	NDT Industry 4.0 Unified NDT Inspection Software platform to the service of NDE community <u>Patrick Huot</u>	#N/D
15:50 - 16:10	Guided Waves The use of segmented Magneto-strictive tools for Medium Range Ultrasonic Inspection of pipelines <u>Andrew Simpson</u>		Transportation (Railway, Automotive, Marin, Aerospace) Scanning pulse phase thermography for surface defect detection in manganese steel turnout frogs <u>Christoph Tuschl</u>	NDT Industry 4.0 Magnetic crawler for welds Visual Testing, based on 3D profilometry and 2D image processing <u>Marco Induti</u>	#N/D
16:10 - 16:40	COFFEE-BREAK				
16:40 - 17:00	Guided Waves Modelling guided wave reflection from defects in pipes - an integrated approach <u>Abdul Mateen Qadri</u>	ACADEMIA INTERNATIONAL RESEARCH DAY (check detailed programme below - from 09:00 to 17:10)	Transportation (Railway, Automotive, Marin, Aerospace) Experimental evaluation of metallic ropes magnetisation under magneto-inductive testing <u>Aldo Canova</u>	NDT Industry 4.0 The AutosonicTM, a system for the full automatic inspection of seamless steel and aluminum gas cylinders industry 4.0 ready. <u>Luca Scaccabarozzi</u>	#N/D

17:00 - 17:20	Guided Waves Data-Driven Remaining Useful Life Prognostic for Aeronautical Composite Structures based on Guided Waves <u>Ferda Cansu GÜL</u>		Transportation (Railway, Automotive, Marin, Aerospace) How to Reach 100% Inspection Coverage of Aeroengine Fan Blades with a High Probability of Detection <u>Etienne Grondin</u>	NDT Industry 4.0 Data processing to analyze health state in X-ray modules <u>Pascal Corbat</u>	#N/D
17:20 - 17:40	#N/D	#N/D	#N/D	#N/D	#N/D
17:40 - 18:00	x	x	x	x	x
17:40 - 18:00	x	x	x	x	x
19:30	GALA DINNER				

DAY 3 - 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	FRONTIERS IN NDT	x	x	x
09:00 - 09:10	x	Opening and Welcome <u>Peter Trampus</u> President of Academia NDT International, Hungary	x	x	x
09:10 - 09:50	x	NDE and Deep Learning: Fashion Trend or the Future? <u>Keynote Presentation - Roman Gr. Maev</u> University of Windsor, Canada	x	x	x
09:50 - 10:20	x	The perspective of Academia NDT International <u>Peter Trampus</u> President of Academia NDT International, Hungary	x	x	x
10:20 - 10:40	x	Experimental evidence of the spin magnetic moment of electron activated by the magnetic field and monitored by acoustic emission <u>Giuseppe Nardoni, N. Fallahi, P. Nardoni</u> I&T Nardoni Institute, Italy	x	x	x
10:40 - 11:10	COFFEE-BREAK				
11:10	x	INTERNATIONAL FORUM ON NDT EDUCATION AT UNIVERSITIES Joint meeting of Academia NDT International and ICNDT WG 3	x	x	x
11:10 - 11:20	x	Opening and Welcome <u>Younho Cho</u> President of WCNDT 2020 and Chairman of WG 3 of ICNDT, South Korea	x	x	x
11:20 - 11:50	x	NDT Integrity Engineering – The Feasible Curriculum <u>Keynote presentation - Peter Trampus 1, Vjera Krstelj 2</u> 1 President of Academia NDT International, Hungary 2 President of Croatian Engineering Association, Croatia	x	x	x
11:50 - 12:10	x	Current Status and Challenges of NDE Education at Academic Institutions in the U.S.A. <u>Reza Zoughi</u> Center for Nondestructive Evaluation (CNDE), IOWA State University, U.S.A.	x	x	x

12:10 - 12:30	x	The UK Research Centre for NDE (RCNDE) – Twenty Years of Delivering Value to Industry <u>Colin Brett</u> RCNDE, United Kingdom	x	x	x
12:30 - 12:50	x	General Education and Training of NDT Personnel, including NDT Education at Universities in South Africa <u>Manfred Johannes</u> Immediate Past President of SAINT, South Africa	x	x	x
12:50 - 14:10	LUNCH				
14:10 - 14:30	x	Experience with an International NDT Master Course in view of Research and Development <u>Uwe Ewert 1, Viktor Lyamkin 2, Christian Boller 1, 3</u> 1 Dresden International University (DIU), Dresden, Germany 2 NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany 3 NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany	x	x	x
14:30 - 14:50	x	Strategy for NDTE Education at Universities in France <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	Strategy for NDT Education at Universities in India <u>Krishnan Balasubramaniam</u> IIT, India	x	x	x
15:30 - 15:50	x	Development and Practical Exploration of NDT Education at Universities in China <u>Yongshun Xiao</u> 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 <u>David Gilbert</u> BINDT, United Kingdom	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				

06-Jul-23 TIME	SESSION				
	ROOM 2	ROOM 3	ROOM 6	ROOM 8	ROOM 1.08
09:00 - 09:20	Guided Waves Use of periodic structures for mode transformation in cylindrical objects <u>I Boris</u>	Materials Characterization HIGH TEMPERATURE MAGNETIC PROPERTIES OF SELECTED STEEL GRADES <u>John Wilson</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Automatic scan planning for CT scans <u>Frank Sukowski</u>	NDT Industry 4.0 A path towards digital industry: Airblade grains detection by directional reflectance technique <u>Clément Remacha</u>	Energy Generation (Fossil, Nuclear and Regenerative Power Generation) Development and adaptation of Ultrasonic system for Windblades inspection using Unmanned Aerial Vehicles <u>Sergio González</u>
09:20 - 09:40	Guided Waves APPLICATIONS OF LINEAR SCANNING MAGNETOSTRICTIVE TRANSDUCERS (MST) FOR FINDING OF HARD TO DETECT ANOMALIES IN STRUCTURAL COMPONENTS <u>Sergey Vinogradov</u>	Materials Characterization Non-destructive magnetic evaluation of microstructure and mechanical properties of advanced high-strength steels <u>Ane Martinez-de-Guerenu</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Process safe automatic evaluation for fast Inline-CT systems <u>Tobias Schön</u>	NDT Industry 4.0 Automating 'Image-Based Simulation' with machine learning for virtual quality assurance in industrial applications <u>Llion Evans</u>	Energy Generation (Fossil, Nuclear and Regenerative Power Generation) Automated analysis of Baffle Bolts <u>Javier De La Morena</u>
09:40 - 10:00	Ultrasound Phased Arrays The effect of ultrasound wave path estimation to defect characterization capability in half-skip total focusing method <u>Håkan Wirdelius</u>	Materials Characterization Heat treatment and residual stress characterization by electromagnetic non-destructive methods <u>Hélène Petitpré</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Unsupervised deep learning for defect detection on CT parts using simulated data <u>Virginia Florian</u>	NDT Industry 4.0 Guided wave ultrasonic feature determination in Type IV composite overwrapped pressure vessels towards the digital twin <u>Bengisu Yilmaz</u>	Energy Generation (Fossil, Nuclear and Regenerative Power Generation) Power Plant Condition Assessment through Engineering, Materials Science, and NDT 4.0 <u>Terry Haigler</u>
10:00 - 10:20	Ultrasound Phased Arrays Development of 1024-elements 2D matrix array transducer for high-resolution 3D phased-array imaging in NDE applications <u>Yoshikazu Ohara</u>	Materials Characterization Magnetic NDT of the Microstructure of Steels for Oil and Gas Applications <u>Alasdair Regan</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Optimization of Computed Tomography Data Acquisition by Means of Quantum Computing <u>Theobald Fuchs</u>	Robotics and Automation Strategies for pipeline inspection using mobile robots <u>Jie Zhang</u>	Energy Generation (Fossil, Nuclear and Regenerative Power Generation) Eddy current response from copper tube extrusion laps compared to artificial notches <u>Barend Van Den Bos</u>
10:20 - 10:40	Ultrasound Phased Arrays Full Waveform Inversion for NDT using ultrasonic linear arrays <u>Thiago A. R. Passarin</u>	Materials Characterization Advances in Automated Eddy-Current Characterisation of Carbon Fibre Composites <u>Qiuji Yi</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Inspection of vaporizers and recuperators in Binary Cycle Geo Thermal Power plant <u>Vignesh Sivanandam</u>	Robotics and Automation DEKRA Robotized Inspection of Hazardous Areas <u>Oliver London</u>	Energy Generation (Fossil, Nuclear and Regenerative Power Generation) Investigation on Potential Benefits of Phase Coherence Imaging in Detection and Sizing of Stress Corrosion Cracking in Austenitic Materials Used in the Nuclear Industry <u>Florin Turcu</u>
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	Ultrasound Phased Arrays Assessing the roughness of surfaces with ultrasound arrays <u>Thiago A. R. Passarin</u>	Materials Characterization Can Martensitic Phase Transformation Measured by Magnetic Methods be an Indicator of Fatigue Damage in Austenitic Steel at Elevated Temperature and Thermo-Mechanical Loading? <u>Viktor Lyamkin</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Merged Mode TFM with Mode Conversion Artifact Suppression <u>Patrick Huot</u>	Robotics and Automation Quantitative Measurement and Evaluation of High-Resolution Ultrasonic Sound Fields using a Novel Automated Ultrasonic Immersion Scanner <u>Sanjeevareddy Kokoori</u>	Art & Cultural Heritage Ten+ Years of Experience in Digitization of Cultural Heritage by Means of Industrial X-ray Computed Tomography: A Summary <u>Theobald Fuchs</u>
11:30 - 11:50	Ultrasound Phased Arrays Low Frequency GFRP Imaging with Variable Aperture TFM <u>Renato Nogueira</u>	Materials Characterization Microchannels produced by Friction Stir Channeling: characterisation with non-destructive testing techniques <u>Miguel A. Machado</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Innovative NDT Technique, for a More Productive Surface Damage Inspection <u>Francois Lachance</u>	Robotics and Automation Innovations in ultrasonic inspection of forged rings <u>Tobias Gautzsch</u>	Art & Cultural Heritage Non-Destructive Examination of Metallic Idols and Statues in Religious Institutions - A Case Study <u>Tejas Ingale</u>
11:50 - 12:10	Ultrasound Phased Arrays Total Focusing Method (TFM) and Phase Coherence Imaging (PCI) applied to various industrial cases <u>Paul Hillman</u>	Materials Characterization Reliable non-destructive detection and characterization of material degradation caused by high-temperature corrosion <u>Sebastian Barton</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Novel concepts for automatic inspection of railway tracks <u>Stephan Falter</u>	Robotics and Automation AUTOMATED MULTI-NDT METHOD <u>Jules Recolin</u>	Art & Cultural Heritage Non-Destructive Testing of Artworks from the Artist Cy Twombly <u>Juliana Berthold</u>
12:10 - 12:30	Ultrasound Phased Arrays Total Focusing (TFM) for the Ultrasonic Testing (UT) of drawn arc stud welding <u>Carlo Romito</u>	Materials Characterization Visualization of stresses, properties and defects in steel components by means of intelligent magneto-optical sensor technology <u>Lukas Lauck</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Thermographic detection of internal defects using photothermal super resolution reconstruction and 2D-structured illumination patterns <u>Julien Lecompanon</u>	Robotics and Automation Autonomous Ultrasonic Disc inspection System <u>Michael Bron</u>	Art & Cultural Heritage Active thermography to look beneath the surface of a historic German aircraft <u>Julia Frisch</u>

12:30 - 12:50	Ultrasound Phased Arrays New Real-Time TFM in 1 shot <u>Christophe Chollet</u>	Materials Characterization Non-Destructive Determination of the Magnetic Properties of Ferritic Steel Strip and Plate Products by Open-Circuit Magnetic Measurement <u>Alasdair Regan</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Visual color inspection with a hyperspectral camera: inline application for automotive parts production <u>Eduardo Assunção</u>	Robotics and Automation The use of Robotic Solutions for inspection of Unpiggable Pipelines <u>Michel Bezemer</u>	Art & Cultural Heritage 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>
12:50 - 14:10	LUNCH				
14:10 - 14:30	Ultrasound Phased Arrays Development and Validation Testing of High-Temperature Phased-Array UT Transducers and Wedges for Process Applications <u>Steve Strachan</u>	Materials Characterization Estimation of the stiffness tensor from Lamb wave velocity profiles measured on steel with different texture <u>Arno Volker</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) AI-based non-destructive weld seam testing in the field of passive thermography <u>Patrick Kammel</u>	Robotics and Automation A Freely Positionable Dual-Robot System for Automated NDT of Large Lightweight Structures <u>Marc Kreutzbruck</u>	
14:30 - 14:50	Ultrasound Phased Arrays Temperature and geometry impact on defect detection and sizing <u>Pavel Mares</u>	Materials Characterization Orthotropic stiffness characterization using guided wavefield data and machine learning <u>Adil Han Orta</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Artificial Intelligence for Assisted Analysis of Eddy Current Data from Heat Exchangers with Non-Ferromagnetic Tubes <u>Marco Michele Sisto</u>	Robotics and Automation Nuclear RPV inspection with multiple ROV:s for shorter inspection time <u>Peter Merck</u>	
14:50 - 15:10	Ultrasound Phased Arrays Ultrasonic sectorial inspection in the presence of temperature gradients <u>Thiago A. R. Passarin</u>	Materials Characterization Study of the crystallization behaviour of phase change materials by in-situ X-ray computed tomography <u>Jorge Martinez Garcia</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Digital radiography by counting photons: innovative solution for testing very thick parts <u>Angela Peterzol</u>	Robotics and Automation Novel automatic inspections <u>Jose Luis Lanzagorta</u>	
15:10 - 15:30	Ultrasound Phased Arrays Ultra-Fast Wall Remaining Thickness Measurements & Reporting <u>Guillaume ITHURRALDE</u>	Materials Characterization Layer thickness measurement of ceramic systems with a numerical model for flash thermography <u>Julia Frisch</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Sub-second X-ray tomography using MetalJet X-ray sources <u>Emil Espes</u>	Robotics and Automation Automatic Methods for Ultrasonic Scanning Paths Generation <u>Michel Brassard</u>	
15:30 - 15:50	Ultrasound Phased Arrays In-process Monitoring and Control of Multi-Pass Fusion Welding Using Phased Arrays <u>Nina Sweeney</u>	Materials Characterization Deep Learning Approach for Multi-Class Segmentation in Industrial CT-Data <u>Tim Schanz</u>	#N/D	Robotics and Automation Automated misalignment correction method for ultrasonic inspection of CFRP parts <u>Alexandre Beausoleil</u>	
15:50 - 16:10	Ultrasound Phased Arrays Detection of defects initiation in weld joints <u>Pavel Mares</u>	Materials Characterization Generative Synthesis of Defects in Industrial Computed Tomography Data <u>Robin Tenschler-Philipp</u>	#N/D	Robotics and Automation High-speed, multi-zone ultrasonic inspection of bar and wire stocks with an in-line phased array inspection system <u>Thomas Würschig</u>	
16:10 - 16:40	COFFEE-BREAK				
16:40 - 17:00	Ultrasound Phased Arrays On the Use of Asymmetrical DMA Probe Assemblies for PA UT Inspection of Tapered Dissimilar Metal Weld Configurations <u>Paul Hillman</u>	Food & Agriculture Monitoring of water distribution in meat upon freezing with X-ray computed tomography <u>Philipp Schütz</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) ELECTRICAL CONDUCTIVITY AND THICKNESS ESTIMATION BASED ON DIMENSION ANALYSIS IN EDDY CURRENT TESTING <u>Antonello Tamburrino</u>	Qualification, certification, standards and training Standard development for Eddy Current Arrays in lieu of Magnetic Particle Testing <u>Casper Wassink</u>	
17:00 - 17:20	Ultrasound Phased Arrays A High-Speed Ultrasound Full-Matrix Capture Acquisition System for Robotic Weld Inspection <u>Marcin Lewandowski</u>	Materials Characterization High-resolution imaging of magnesium feedstock material for Wire Arc Additive Manufacturing (WAAM) <u>Sascha Senck</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Resonant Inductive Arrays for Non-Destructive Testing Applications <u>Robert Hughes</u>	Qualification, certification, standards and training Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u>	
17:20 - 17:40	Ultrasound Phased Arrays Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. <u>Paul Hillman</u>	Materials Characterization Monitoring crack tip position in Cracked Lap Shear specimens subjected to fatigue loading <u>Michele Carboni</u>	New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) Application of magnetic recording method to the non-destructive evaluation of ferromagnetic structures <u>Tomasz Chady</u>	Qualification, certification, standards and training The conversion from film to digital and the revision of ISO 17636-2, weld testing, with digital radiography <u>Uwe Zscherpel</u>	

17:40 - 18:00	Ultrasound Phased Arrays 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>	Materials Characterization INFLUENCE OF BIAxIAL STRESS ON MAGNETIC BEHAVIOR OF HOT-ROLLED STEELS <u>Olivier Hubert</u>	Guided Waves Guided Waves Propagation in Composite Overwrapped Pressure Vessel Towards the Design of a Sensor Network for Structural Health Monitoring <u>Samir Mustapha</u>	Qualification, certification, standards and training Enhancing the NDE training at the light of the new technologies and market demands <u>Rafael Martínez-Oña</u>	
18:00 - 18:20	Ultrasound Phased Arrays Inspection for non-planar shaped welded joints of pipes using FMC ultrasonic technique <u>Sho Yamaguchi</u>	#N/D	#N/D	#N/D	

DAY 5 - 7 JULY 2023

07-Jul-23 TIME	SESSION ROOM 2	ROOM 3	ROOM 6	ROOM 8	ROOM 1.08
09:00 - 09:20	Ultrasound Phased Arrays Overview of NDT Array Techniques Applied to Inspection of Rolling Stock <u>Giovanni Corti</u>	Materials Characterization 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	NDT Reliability and Statistic 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	Ultrasound Phased Arrays Parametric reconstruction of surfaces for ultrasound immersion imaging <u>Thiago A. R. Passarin</u>	Materials Characterization How the EU project "Online Microstructure Analytics" advances inline sensing of microstructure during steel manufacturing <u>Frenk Van Den Berg</u>		NDT Reliability and Statistic Reliability Analysis of Pipe Wall Thinning based on Quantification of Ultrasonic Testing <u>Kantaro Ikeda</u>	
09:40 - 10:00	Ultrasound Phased Arrays Automated inspection of heavy plates with phased-array based porosity testing <u>Andreas Knam</u>	Materials Characterization MAGNETOSTRICTIVE BEHAVIOR OF HOT-ROLLED STEELS <u>Olivier Hubert</u>		NDT Reliability and Statistic A POD approach by simulation of an industrial ultrasonic inspection <u>Benoit Dupont</u>	
10:00 - 10:20	Ultrasound Phased Arrays Automated IBEX crawler for PAUT inspection for in-service ferromagnetic assets <u>Natalia Marcial</u>	Materials Characterization EDDY CURRENT FALSE INDICATIONS IN AUSTENITIC STEEL AND TITANIUM ALLOYS HEAT EXCHANGER TUBES ACTIVATED BY STRESS <u>VALENTYN UCHANIN</u>		NDT Reliability and Statistic Inspectability and POD Investigation for Optical Solar Reflector Bonded Satellite Panels <u>Utku Şahin</u>	
10:20 - 10:40	Ultrasound Phased Arrays Comparative study of advanced image reconstruction algorithms for complex arbitrary components <u>Sumana Sumana</u>	#N/D		NDT Reliability and Statistic High energy Computed Tomography of high density alloys using a 6 MeV Linear Accelerator: detectability and use of Artificial Intelligence <u>Fabio Esposito</u>	
10:40 - 11:10	COFFEE-BREAK				
11:10 - 11:30	Ultrasound Phased Arrays Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u>	#N/D	Joint EFNDT-ICNDT Workshop: Training, Qualification and Certification – the new 9712 and more	NDT Reliability and Statistic Introduction of a certification procedure for the acoustic response of reference reflectors for ultrasonic testing <u>Thomas Würschig</u>	
11:30 - 11:50	Ultrasound Phased Arrays Towards a simplified verification of ultrasound phased array systems <u>Benoit Dupont</u>	#N/D		NDT Reliability and Statistic USING MODELLING AND METAMODELS FOR RELIABILITY STUDY IN NDE <u>Fabrice Foucher</u>	
11:50 - 12:10	Ultrasound Phased Arrays Time of flight fast approximation method for ultrasound sub-surface imaging <u>Guillermo Cosarinsky</u>	#N/D		#N/D	

12:10 - 12:30	Ultrasound Phased Arrays Innovative Instrument Platforms for Ultrasonic Inspections <u>Johannes Buechler</u>	#N/D		x	
12:30 - 13:30	x	x	x	CLOSING CEREMONY	x
13:30 - 14:30	LUNCH				
14:30	CLOSING				