13TH EUROPEAN CONFERENCE ON NON-DESTRUCTIVE TESTING LISBON - PORTUGAL, 3-7 JULY 2023

DAY 1 - MONDAY, 3 JULY 2023

| 03-Jul-23 | SESSION | | | | | |
|----------------|---|---|--|--|--|-----------|
| TIME | AUDITORIUM 1 | AUDITORIUM 2 | AUDITORIUM 3 | AUDITORIUM 6 | AUDITORIUM 8 | ROOM 1.08 |
| 09:00 - 12:30 | OPENING CEREMONY | X | X | Х | X | X |
| 12:30 - 14:10 | LUNCH | | | | • | |
| 14:10 - 14:30 | S1 - Additive Manufacturing OC103 - Defect Detection in Additively Manufactured Parts by Laser Ultrasound Tomography <u>Bernhard Reitinger</u> | S7 - Ultrasound (EMAT, Laser Ultrasonics, Air- coupled, nonlinear) OC421 - Multi-functional ultrasound phased array imaging <u>Choon-su Park</u> | S12 - Surface Methods (MPI & PT) OC32 - Bio Water Based Liquid Penetrants and Magnetics: a safer and cost-efficient solution for the future <u>Michele Cevenini</u> | S17 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC47 - Modelling Crystallographic Texture Evaluation and Non-Destructive Measurement of Magnetic Anisotropy using an Electromagnetic Sensor in Interstitial Free (If) Steels <u>Mohsen Aghadavoudi Jolfaei</u> | S23 - NDT of Composites OC137 - Ultrasonic Inspection for aging monitoring of GFRP composites <u>Marcella Grosso</u> | #N/D |
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| 14:30 - 14:50 | S1 - Additive Manufacturing OC93 - Inspection of Additive manufacturing parts, study of NDT solutions for WAAM <u>Fabien Lefevre</u> | S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC130 - Phased array probes for air-coupled ultrasonic testing based on cellular polymer <u>Mate Gaal</u> | S12 - Surface Methods (MPI & PT) OC11 - Mechanized Dye Penetrant Internal Piping inspection system <u>Peter Merck</u> | S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC61 - Active Infrared Thermography applied for concrete structures inspection in Nuclear Power Plants <u>Javier De La Morena</u> | S4 - NDT of Composites OC18 - MEMS - sensor array for non-contact ultrasonic composite panel inspection <u>Arno Volker</u> | #N/D |
| 14:50 - 15:10 | S1 - Additive Manufacturing OC212 - Online eddy current testing of PBF-LB/M parts using GMR sensor arrays during manufacturing <u>Matthias Pelkner</u> | S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC107 - Thermoacoustic phased-array radiators – Theory, characteristics, and applications <u>Daniel Hufschläger</u> | S12 - Surface Methods (MPI & PT) OC57 - UV-A LED's in fluorescent penetrant testing and magnetic particle testing <u>Jesko Klippstein</u> | S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials OC319 - Advanced Eddy Current Testing of Carbon Composites <u>Marie Rudolfova</u> | S4 - NDT of Composites OC232 - Air-coupled Ultrasonic Inspection of Thermoplastic Composite Structures for Aerospace Vehicles <u>Armin Huber</u> | #N/D |
| | | | | | | |
| 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> | #N/D |
| 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 Schratt</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> | #N/D |
| 15:50 - 16:10 | S1 - Additive Manufacturing OC271 - ADVANCED X-RAY COMPUTED TOMOGRAPHY IN ADDITIVE MANUFACTURING <u>Gerhard Zacher</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> | S20 - Green & Echo Technology OC31 - Work safety in magnetic particle and penetrant testing <u>Kersten Alward</u> | 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> | #N/D |
| 16:10 - 16:40 | COFFEE-BREAK | | | | | |
| 16:40 - 17:00 | S1 - Additive Manufacturing OC228 - Non-contact assessment of porosity in metal 3D printed parts by vibration spectra <u>Alexey Tatarinov</u> | S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC211 - Ultrasonic C-scan imaging of damage in the quefrency 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> | #N/D |
| 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> | #N/D |
| 17:20 | WELCOME RECEPTION | | | | | |
| 12th ECNDT 202 | | | Please note the Programme is stil | | | Page 1 of |

13th ECNDT 2023

DETAILED & SCIENTIFIC PROGRAMME

Last update: 25.05.2023

DAY 2 - TUESDAY, 4 JULY 2023

| 04-Jul-23 | SESSION | | | |
|---------------|--|--|--|------------|
| TIME | AUDITORIUM 2 | AUDITORIUM 3 | AUDITORIUM 6 | |
| 09:00 - 09:20 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| | Air-coupled, nonlinear) | OC150 - CREATION AND NON-DESTRUCTIVE CONTROL | Engineering and Materials | OC31 |
| | OC428 - Online quality monitoring in the production of | OF ELECTRIC HEATING ELEMENTS OF THE AIRCRAFT | OC78 - Time reversal method applied to leaky Lamb | |
| | organo sheets by air-coupled ultrasonic testing | ICING PREVENTION SYSTEM | waves in an immersed layered medium | |
| | | | | |
| | Ralf Steinhausen | Mykhail Kazakevych | Jean-Christophe Vallée | |
| | | | | |
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| 09:20 - 09:40 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| | Air-coupled, nonlinear) | OC196 - Acoustic material testing a progressive | Engineering and Materials | OC2 |
| | OC256 - Directivity of laser generated | testing method. | OC176 - Multi-dimensional data fusion study | No |
| | ultrasonic waves in thermoelastic regime | | for ultrasonic and radiographic non-destructive | |
| | | <u>Jörg Ritter</u> | inspections | |
| | <u>Xin Tu</u> | | | |
| | | | Elena Jasiuniene | |
| | | | | |
| 09:40 - 10:00 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| | Air-coupled, nonlinear) | OC91 - Investigation of Kissing Bonds in | Engineering and Materials | 00 |
| | OC81 - Automated laser ultrasound for | Adhesive Joints | OC178 - Inductive arrays for inspection of | |
| | weld seams | | curved structures | |
| | | Mike Kornely | | |
| | <u>Norbert Huber</u> | | Alexis Hernandez | |
| | | | | |
| 10:00 - 10:20 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| | Air-coupled, nonlinear) | OC382 - A new Defects Detection Method in | Engineering and Materials | 00 |
| | OC67 - Noncontact measurement of bolt axial force | CFRP with non-contact Lamb Waves | OC257 - Defect detection and sizing in components of | Additive I |
| | during tightening processes using | Propagation and Wavelet Transform Analysis | the energy sector based on phase velocity variation of | |
| | scattered laser ultrasonic waves | | ultrasonic guided waves | |
| | | Lea Lecointre | | |
| | <u>So Kitazawa</u> | | Renaldas Raisutis | |
| | | | | |
| 10:20 - 10:40 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| | Air-coupled, nonlinear) | OC240 - Nonlinear Guided Wave Damage | Engineering and Materials | OC |
| | OC42 - Combination of laser ultrasonics and | Imaging in Composite Structures Using A | OC258 - Effect of Object Thickness on | |
| | thermography for enhanced defect | Sparse Sensor Network | Resolution of TDI X-ray Detectors | |
| | characterization in CFRP parts | | | |
| | | Yusheng Ma | Anthony Dimalanta | |
| | Bernhard Reitinger | | | |
| | | | | |
| 10:40 - 11:10 | COFFEE-BREAK | | | |
| 11:10 - 11:30 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| | Air-coupled, nonlinear) | OC223 - 3D-characterization of carbon fibre reinforced | Engineering and Materials | OC106 |
| | OC55 - Assessment of metallurgical properties | polymers by Talbot-Lau grating interferometry | | the Hot Er |
| | on moving steel strips at high temperature | radioscopy and | on HDPE joints | by N |
| | with laser ultrasonics | computed tomography | | |
| | | | Ludovic Pinier | |
| | Guillaume Cousin | Johann Kastner | | |
| | | | | |
| 11:30 - 11:50 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| | Air-coupled, nonlinear) | OC401 - Inspection benchmarking of Fibre Reinforced | Engineering and Materials | OC166 |
| | OC185 - Experimental analysis of planar/volumetric | Polymeric Composites produced | OC383 - Material Characterisation of Polyamide using | |
| | defects in ultrasonics NDT: Standardization of | by Additive Manufacturing | Fluidic Oscillator as a Frequency | Ultraso |
| | evaluation metrics using symbiosis of TOFD and TR- | by Additive Manufacturing | Modulated Air-Coupled Ultrasonic Transducer | ontaso |
| | NEWS methods | Miguel A. Machado | modulated All-coupled Oltrasonic Hallsudgel | |
| | | | Viswa Ratnasri Sunkavalli | |
| | Serge Dos Santos | | | |
| | JEIGE DOS JAIILOS | | | |
| 11:50 - 12:10 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | |
| 11.30 - 12:10 | Air-coupled, nonlinear) | OC54 - Multi-domain contactless NDI approach: Data | | OC83 - Mo |
| | • | | 0 0 | |
| | OC344 - Robot-ready spot- and seam weld | fusion of structural light scanning with thermography | OC384 - Thermal stress opening of closed cracks with | detect |
| | testing based on laser excitation and | and shearography | local cooling on the cracked surface | |
| | air-coupled detection of ultrasound | Detrick lawson | | |
| | locof Dörsbashar | Patrick Jansen | <u>Arthur Perrin</u> | |
| | <u>Josef Pörnbacher</u> | | | |
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| AUDITORIUM 8 | ROOM 1.08 |
|---|---|
| S1 - Additive Manufacturing | S13 - Numerical Simulation, Modeling and |
| 10 - Near Field Microwave Probe for Metal | Data Processing |
| Additive Manufacturing Imaging | OC412 - Numeric Prediction of the Detail |
| | Visibility in Industrial X-Ray Computed |
| <u>Luís Rosado</u> | Tomography by Human Observers |
| | |
| | <u>Uwe Ewert</u> |
| | |
| S1 - Additive Manufacturing | S13 - Numerical Simulation, Modeling and |
| 205 - Automated Multi-Modal In-Process | Data Processing |
| Ion-Destructive Evaluation of Wire + Arc | OC252 - Industrial Radiography simulation with |
| Additive Manufacturing | a Monte-Carlo model including full physics |
| | |
| <u>Ehsan Mohseni</u> | Andreas Schumm |
| | |
| | |
| S1 - Additive Manufacturing | S13 - Numerical Simulation, Modeling and Data |
| OC324 - Inline inspection of metal parts | Processing |
| produced by Wire and Arc Additive | OC301 - Realistic Simulation of CT Systems - |
| Manufacturing (WAAM) | An Introduction to The CTSimU2 Project |
| | |
| <u>Telmo G. Santos</u> | <u>Carsten Bellon</u> |
| | |
| S1 - Additive Manufacturing | S13 - Numerical Simulation, Modeling and Data |
| OC337 - Flaw Detection in Wire and Arc | Processing |
| e Manufacturing Using In-Situ Wide Frequency | OC118 - Anomalies detector on industrial |
| Bandwidth Acoustic Pressure | radiographies: application on High |
| | Pressure Turbine Blades |
| André Ramalho | Clára ant Darra a ha |
| | Clément Remacha |
| S1 - Additive Manufacturing | S13 - Numerical Simulation, Modeling and Data |
| 0C441 - Tomosynthesis for large additive | Processing |
| manufacturing parts | OC254 - Improvement of radiographic |
| | images quality using algorithms dedicated to |
| Anne-Françoise Obaton | geometric blur reduction |
| <u>Allie Hallçoise obditoli</u> | Sconcerie and reduction |
| | Nezha Mamouni |
| | |
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| S1 - Additive Manufacturing | S13 - Numerical Simulation, Modeling and Data |
| 06 - Investigation of the Melting Process in | Processing |
| End of a Fused Filament Fabrication 3D Printer | OC407 - Simulation of Eddy Current Rail |
| <pre>/ Means of X-Ray Computed Tomography</pre> | Testing Data for Neural Networks |
| | |
| Julian Ehrler | Alexander Friedrich |
| | |
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| S1 - Additive Manufacturing | S13 - Numerical Simulation, Modeling and Data |
| .66 - In-process Non-Destructive Evaluation | Processing |
| + Arc Additive Manufacture Components Using | OC34 - Formulation of a Mechanical Stress Dependent |
| sound High-Temperature Dry-Coupled Roller- | Macroscopic Magnetic Model for Incremental |
| Probe | Permeability Simulation |
| | |
| <u>Rastislav Zimermann</u> | Patrick Lombard |
| | |
| | |
| S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
| Monitoring Barkhausen noise measurements to | Processing |
| ct and reduce grinding burn and case depth | OC368 - A Physics-informed Neural Network for Pulsed |
| defects in manufactured parts | Thermography-Based Defect Detection and Parameter Estimation |
| Kizkitza Gurruchaga | Parameter Estimation |
| <u>Kizkitza Gurruchaga</u> | Vuan Van |
| | <u>Yuan Yao</u> |
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| 12:10 - 12:30 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
|--------------------------------|--|---|---|---|---|
| | Air-coupled, nonlinear) | OC284 - Automated woven background removal for | Engineering and Materials | OC146 - A Machine Learning Based-Guided | Processing |
| | OC45 - Tensile properties estimation of aluminum | enhanced infrared thermographic inspection of | OC389 - The importance of material guiding in | Wave Approach for Damage Detection and | OC204 - Spatial resolution in photothermal |
| | alloys using deep learning-based ultrasonic testing | composites | the reliability of rotary UT testing of tubes - a practical | Assessment in Composite Overwrapped | and photoacoustic imaging |
| | | | approach to characterize | Pressure Vessels | |
| | <u>Kyung-young Jhang</u> | <u>Gaétan Poelman</u> | testing equipment | | Peter Burgholzer |
| | | | | <u>Amir Charmi</u> | |
| | | | <u>Klaus Dickmann</u> | | |
| 12:30 - 12:50 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
| 12.30 - 12.30 | • • • • • • • • • • • • • • • • • • • | OC27 - Porosity in Carbon Fiber laminate part. Porosity | - | OC190 - Laser ultrasonics for online monitoring | Processing |
| | OC380 - A study on the nonlinear correlation between | coupons for the evaluation of the percentage voids | OC409 - Modern corrosion mapping of storage tank | of microstructures in the hot strip mill | OC265 - A WebGPU-based acoustic wave simulator for |
| | viscoelasticity and guided ultrasound | volume. | bottoms – notable advancements in critical zone | | ultrasound NDT |
| | | | coverage, inspection efficiency and | Mikael Malmström | |
| | <u>Younho Cho</u> | Valter Capitani | data integrity. | | Thiago A. R. Passarin |
| | | | | | |
| | | | Andrew Simpson | | |
| 12:50 - 14:10 | LUNCH | | | | |
| 14:10 - 14:30 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
| 14.10 - 14.50 | Air-coupled, nonlinear) | OC56 - Computed tomography investigations of | Engineering and Materials | OC195 - Using DICONDE for NDT Data Fusion | Processing |
| | OC346 - Self-calibrating SAFT algorithm for | 3D aluminum - GMT hybrid profiles | OC414 - Quantitative analysis of delaminations by | | OC263 - Using Perfectly Matched Layer in a GPU |
| | the inspection of electronic devices using | manufactured by compression molding | means of lock-in infrared thermography | <u>Geo Jacob</u> | simulation of ultrasound NDT |
| | scanning acoustic microscopy | | | | |
| | | Manel Ellouz | Javier Rodríguez-Aseguinolaza | | Thiago A. R. Passarin |
| | <u>Mario Wolf</u> | | | | |
| 14:20 14:50 | S10 Diamodical Taskaslary | | S16 - NDE & NDT of Civil Infrastructure, Structural | | C12 Numerical Cimulation Madelins and Data |
| 14:30 - 14:50 | S19 - Biomedical Technology OC85 - Modelling of an ultrasound-based system for | S4 - NDT of Composites OC243 - Defect-aware Super-resolution Thermography | S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials | S2 - NDT Industry 4.0 OC92 - Reduction of rejects by combining data from | S13 - Numerical Simulation, Modeling and Data Processing |
| | cataract detection and classification | by Adversarial Learning | | the casting process and automatic | OC293 - Determining ultrasonic propagation effective |
| | | by Adversaria Learning | OC88 - Mimicking dam upstream slope scenarios | X-ray inspection | properties in complex heterogeneous |
| | Mário Santos | Cheng Liangliang | in acrylic tanks for ultrasonic evaluation | | media through microstructure-scale simulation |
| | | <u></u> | | Thomas Stocker | , , , , , , , , , , , , , , , , , , , |
| | | | <u>Tiago Dourado</u> | | Vincent Dorval |
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| 14:50 - 15:10 | S7 - Ultrasound (EMAT, Laser Ultrasonics, | S4 - NDT of Composites | S16 - NDE & NDT of Civil Infrastructure, Structural | S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
| 14:50 - 15:10 | Air-coupled, nonlinear) | OC309 - RoboCT - Robot based Micro-CT of | S16 - NDE & NDT of Civil Infrastructure, Structural Engineering and Materials | OC6 - In-situ microstructure monitoring during | Processing |
| 14:50 - 15:10 | Air-coupled, nonlinear) OC352 - Visualization of wave modes | | Engineering and Materials | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high | Processing OC26 - Simulation of wave propagation in austenitic |
| 14:50 - 15:10 | Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures | Engineering and Materials OC201 - Metrological characterization of the | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor | Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure |
| 14:50 - 15:10 | Air-coupled, nonlinear) OC352 - Visualization of wave modes | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures | Engineering and Materials | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor | Processing OC26 - Simulation of wave propagation in austenitic |
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| 14:50 - 15:10 | Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures | Engineering and Materials OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor | Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure predicted by Cellular Automaton method |
| | Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager <u>Michael Kaack</u> | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures <u>Wolfgang Holub</u> | Engineering and Materials OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores <u>Tiago Dourado</u> | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor <u>Fanfu Wu</u> | Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure predicted by Cellular Automaton method <u>Shan Lin</u> |
| 14:50 - 15:10 15:10 - 15:30 | Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager <u>Michael Kaack</u> S9 - Guided Waves | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures <u>Wolfgang Holub</u> S4 - NDT of Composites | Engineering and Materials OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores <u>Tiago Dourado</u> S15 - Monitoring (SHM, Acoustic Emission, | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor <u>Fanfu Wu</u> S2 - NDT Industry 4.0 | Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure predicted by Cellular Automaton method <u>Shan Lin</u> S13 - Numerical Simulation, Modeling and Data |
| | Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager <u>Michael Kaack</u> S9 - Guided Waves OC342 - A study on the wave propagation on | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures <u>Wolfgang Holub</u> S4 - NDT of Composites OC361 - X-ray Computed Tomography Inspection of | Engineering and Materials OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores <u>Tiago Dourado</u> S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor <u>Fanfu Wu</u> S2 - NDT Industry 4.0 OC1 - On the use of inline phase transformation | Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure predicted by Cellular Automaton method <u>Shan Lin</u> S13 - Numerical Simulation, Modeling and Data Processing |
| | Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager <u>Michael Kaack</u> S9 - Guided Waves OC342 - A study on the wave propagation on weld joints by the use of feature-guided | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures <u>Wolfgang Holub</u> S4 - NDT of Composites | Engineering and Materials OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores <u>Tiago Dourado</u> S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC241 - Self-sensing metallic material based | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor <u>Fanfu Wu</u> S2 - NDT Industry 4.0 | Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure predicted by Cellular Automaton method Shan Lin S13 - Numerical Simulation, Modeling and Data Processing OC8 - 3D HYBRID MODELING FOR THE ULTRASONIC |
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| 15:10 - 15:30 | Air-coupled, nonlinear) OC352 - Visualization of wave modes generated by electromagnetic acoustic transducers with the photoelastic imager <u>Michael Kaack</u> S9 - Guided Waves OC342 - A study on the wave propagation on weld joints by the use of feature-guided wave mixing Jaesun Lee S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) OC437 - IN-SERVICE OIL REFINERIES STORAGE | OC309 - RoboCT - Robot based Micro-CT of full size Composite Aerostructures <u>Wolfgang Holub</u> S4 - NDT of Composites OC361 - X-ray Computed Tomography Inspection of Novel Ceramic Matrix Composites <u>Nick Brierley</u> S4 - NDT of Composites OC39 - NDT & METROLOGY – Improving Efficiency in Aerospace Manufacturing utilizing the | Engineering and Materials OC201 - Metrological characterization of the longitudinal ultrasonic velocity of cylindrical rock cores <u>Tiago Dourado</u> S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC241 - Self-sensing metallic material based on piezoelectric particles <u>Pedro Ferreira</u> S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC12 - Working Smart Using Wireless UT | OC6 - In-situ microstructure monitoring during tempering of quenched AISI4340 steels using a high temperature electromagnetic sensor <u>Fanfu Wu</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> S2 - NDT Industry 4.0 OC19 - HIGH TEMPERATURE CHARACTERISATION OF THE STIFFNESS MATRIX OF DIFFERENT STEELS | Processing OC26 - Simulation of wave propagation in austenitic stainless steel welds with solidification structure predicted by Cellular Automaton method Shan Lin S13 - Numerical Simulation, Modeling and Data Processing OC8 - 3D HYBRID MODELING FOR THE ULTRASONIC PHASED ARRAY INSPECTION OF POROSITY IN HEAVY PLATES: SIMULATION AND EXPERIMENTAL VALIDATION Sanjeevareddy Kokoori S9 - Guided Waves OC234 - Excitation and reception of higher order guided Lamb waves in sheet type composite structures |
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| 16:40 - 17:00 17:00 - 17:20 | S9 - Guided Waves OC371 - Deep learning algorithms for design of periodic structures and dispersion curves calculation <u>Kseniia Barashok</u> S9 - Guided Waves | Microwave, Terahertz, and Infrared OC73 - Non-destructive testing of fiber-reinforced composites by terahertz method <u>Waldemar Swiderski</u> Microwave, Terahertz, and Infrared | S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) OC123 - Identification of overloads on splined shafts by means of eddy current testing technology René Gansel S15 - Monitoring (SHM, Acoustic Emission, | OC111 |
|--------------------------------|--|---|--|--------------------|
| | OC214 - Guided Wave-based Structural Health Monitoring for a Composite Aircraft Fuselage under Mechanical Load <u>Maria Moix-Bonet</u> | OC108 - Improvement of 3D-Active Thermography by using Artificial Intelligence <u>Marc Kreutzbruck</u> | Resonance, Vibration Analysis) OC66 - A low-cost ultrasonic array for long-term and high-resolution localised monitoring <u>Xiaoyu Sun</u> | OC215 - using t |
| 17:20 - 17:40 | S9 - Guided Waves OC306 - Passive guided wave tomography for monitoring corrosion in pipes <u>Arnaud Recoquillay</u> | 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> | OC34 of th |
| 17:40 - 18:00 | S9 - Guided Waves OC328 - 24/7 Large Area Corrosion Monitoring <u>Thomas Voght</u> | 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> | |
| 18:00 - 18:20 | S9 - Guided Waves OC327 - Detection and Measurement of Pitting Corrosion using Short Range Guided Wave Scanning <u>Sam Horne</u> | 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> | OC188 - Imagi |

DAY 3 - WEDNESDAY, 5 JULY 2023

| 05-Jul-23 | SESSION | | | | |
|---------------|---|---|---|---|---|
| TIME | AUDITORIUM 2 | AUDITORIUM 3 | AUDITORIUM 6 | AUDITORIUM 8 | ROOM 1.08 |
| 09:00 - 09:20 | S13 - Numerical Simulation, Modeling and Data | S25 - ACADEMIA INTERNATIONAL RESEARCH DAY | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| | Processing | | Resonance, Vibration Analysis) | OC140 - Platform for ultrasonic data | OC62 - Development of HOIS guidance for |
| | OC157 - A generic numerical solver for modeling the | (check detailed programme below - | OC231 - Vibrational NDT with Under-sampled Data | management and evaluation | ultrasonic NDT for non-intrusive inspection at |
| | influence of stress conditions on guided | from 09:00 to 17:10) | through Physics-informed Neural Networks | | elevated temperatures |
| | wave propagation for SHM applications | | | Iratxe Aizpurua | |
| | | | Saeid Hedayatrasa | | Helen Peramatzis |
| | André Dalmora | | | | |
| | | | | | |
| 09:20 - 09:40 | S9 - Guided Waves | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| | OC436 - Lamb Wave Mode Conversion Analysis for | | Resonance, Vibration Analysis) | OC171 - Automated adaptive TFM method for | OC110 - Field inspection of steel pipes using automatic |
| | Crack Assessment | | OC247 - Sensitivity study of tuned Lamb wave | gas turbine testing in NDE 4.0 | UT |
| | | | excitation with an embedded Lead Zirconate Titanate | | |
| | <u>Artur Ribeiro</u> | | transducer in composite laminates | Christian Hassenstein | Raphaël Michel |
| | | | | | |
| | | | <u>Nina Kergosien</u> | | |
| 09:40 - 10:00 | S9 - Guided Waves | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| 09.40 - 10.00 | OC177 - Influence of Environmental and Operational | | Resonance, Vibration Analysis) | OC335 - Transforming Ultrasonic Inspection Data | OC124 - Ultrasonic inspection of "shaped pipes" |
| | Variation on Reliability Assessment | | OC280 - Damage Monitoring of Buried Pipelines under | Management through Cloud-Based Solutions | ociza on asome inspection of shaped pipes |
| | of Guided Wave-based Structure Health | | Harsh Noise Environment using Low Frequency | Wanagement through cloud based solutions | Fabien Lefevre |
| | Monitoring System on a Pipeline Structure | | Acoustic Emission Analysis | André Lamarre | |
| | | | | <u>Andre Lamarie</u> | |
| | Ahmed Bayoumi | | Sun-Ho Lee | | |
| | | | <u></u> | | |
| | | | | | I |

| S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
|--|--|
| - Automated Spot Weld Testing using a Smart | Processing |
| Robotic System | OC298 - AI-based and model assisted diagnostic for |
| | ultrasonic TFM weld inspection |
| York Oberdoerfer | |
| | Stéphane Le Berre |
| | |
| | |
| S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
| - Easy to go and innovative validation process | Processing |
| the spot weld inspection system PHAsis and | OC338 - Automated honeycomb detection during |
| related software | Impact Echo inspections using AI trained by simulation |
| | data |
| Philipp Poltersdorf | |
| | Fabian Dethof |
| | |
| S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
| 348 - FebUS - Development and application | Processing |
| the latest technologies in the UT-NDT field | OC450 - THICKNESS MEASUREMENT FOR METALLIC |
| | LAMINATES: AN ACCURATE METHOD FOR |
| Damiano Sallemi | INDUSTRIAL APPLICATIONS |
| | |
| | <u>Antonello Tamburrino</u> |
| | |
| | |
| S2 - NDT Industry 4.0 | S13 - Numerical Simulation, Modeling and Data |
| OC370 - Knowledge sharing as a | Processing |
| central idea of NDT 4.0 | OC97 - Custom Transient Finite Element Method and |
| | Ray Tracing Hybridization Strategies for Ultrasonic |
| <u>Tamara Diederichs</u> | Testing Modelling |
| | |
| | Edouard Demaldent |
| S2 - NDT Industry 4.0 | S4 - NDT of Composites |
| 3 - NDE 4.0 Roadmap for Ultrasonic Nonlinear | OC377 - Modelling low-frequency vibration response |
| ging within Industry 4.0: the importance of | and defect detection in homogeneous solids and |
| | - |
| prescriptive Signal, Image and | honeycomb composite panels |
| Data Analysis | Joshua Aigbotsua |
| Sorgo Dos Santos | JOSTILA AIGDOLSUA |
| Serge Dos Santos | |

| 10:00 - 10:20 | S9 - Guided Waves | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
|---------------|--|---|---|--|--|
| 10.00 - 10.20 | OC275 - A Realistic 'digital twin' for guided wave SHM | | Resonance, Vibration Analysis) | OC35 - Production Integrated CT Inspection Process | OC264 - Virtual encoder: a two-dimension visual |
| | of pipelines | | OC448 - SHM of wire- breakage in concrete bridges by | oess modución integrated en inspection motess | odometer for NDT |
| | or pipelines | | Acoustic Emission Technique | Alexander Suppes | |
| | Dannan Vu | | Acoustic Emission rechnique | <u>Alexander Suppes</u> | Thiago A. R. Passarin |
| | <u>Panpan Xu</u> | | Horst Trattnig | | Illiago A. N. Passalli |
| | | | HOIST MALLING | | |
| 10:20 - 10:40 | S9 - Guided Waves | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| 10:20 - 10:40 | OC334 - Development of a digital twin for generating | | Resonance, Vibration Analysis) | OC175 - Magneto-Optic Screening Technology | OC356 - Detection and Characterisation of |
| | realistic ultrasonic guided | | OC416 - Automatized Scaling Monitoring in Pipelines | for Integrity Monitoring of Pipelines | Hydrogen-Induced Cracking using ultrasonic |
| | wave signals | | with Acoustic Resonance Testing | for integrity Monitoring of Fipelines | NDT inspection techniques |
| | wave signals | | with Acoustic Resonance resting | Gabriel Dinis | NDT hispection techniques |
| | Vivek Nerlikar | | Isabelle Stüwe | | Peter Merck |
| | VIVER NETTIKAL | | Isabelle Stuwe | | <u>relei Werck</u> |
| 10:40 - 11:10 | COFFEE-BREAK | | | | |
| 11:10 - 11:30 | S9 - Guided Waves | S25 - ACADEMIA INTERNATIONAL RESEARCH DAY | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| 11:10 - 11:50 | OC17 - Impact localization in composite structures | 525 - ACADEMIA INTERNATIONAL RESEARCH DAT | Resonance, Vibration Analysis) | OC134 - Numerical study of the Line Scan InfraRed | OC255 - Evaluation and Simulation of HTHA Damaged |
| | with guided wave and 1D | (check detailed programme below | OC226 - Frequency Steerable Acoustic Transducers for | Thermography (LST-IR) to optimize the inspection of | Specimen using UT Advanced Techniques |
| | convolutional neural network | (check detailed programme below - | Guided Waves-based Structural Health Monitoring | aircraft structures | Specifien using of Advanced rechniques |
| | convolutional neural network | from 09:00 to 17:10) | Guided waves-based Structural Health Monitoring | anciali structures | Bastien Clausse |
| | Po Fong | | Masoud Mohammadgholiha | Ludovic Gaverina | Bastien Clausse |
| | <u>Bo Feng</u> | | | | |
| | | | | | |
| 11:30 - 11:50 | S9 - Guided Waves | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| 11.50 - 11.50 | OC154 - Guided waves defect interaction coefficients | | | - | OC369 - Phased Array Ultrasonic Testing for Inspection |
| | obtained through image-based models | | OC206 - Acoustic non-destructive testing of UAV's | polymer matrix composites using thermographic vision | , . |
| | obtailled through mage-based models | | propellers during predeparture and post-flight checks | data | of Live Storage Tallk |
| | Daniel Lozano | | propeners during predeparture and post-night checks | uata | Soonho Won |
| | Damer Eozano | | Maria Soria Gomez | Nuno Mendes | |
| | | | | Nullo Mendes | |
| | | | | | |
| 11:50 - 12:10 | S9 - Guided Waves | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| 11.50 - 12.10 | OC159 - On the development of a model-assisted | | Resonance, Vibration Analysis) | OC181 - Applications of Deep Learning in NDE | OC202 - Latest Developments in the Hardspot |
| | design procedure of guided wave-based | | OC415 - An Acoustic Emission IoT Device for | OCISI - Applications of Deep Learning in NDL | Inspection of heavy plates |
| | SHM systems | | Wind Turbine Rotor Blade Condition Monitoring | <u>Ryan Scott</u> | inspection of neavy plates |
| | Shiw systems | | while rurbine rotor blade condition wonitoring | <u>Nyan Scott</u> | Gerald Schneibel |
| | Enes Savli | | Valery Godinez-Azcuaga | | |
| | | | Valety Obullez-Azcuaga | | |
| 12:10 - 12:30 | S13 - Numerical Simulation, Modeling and Data | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| | Processing | | Resonance, Vibration Analysis) | OC396 - Automatic defect recognition on parts after | OC438 - Low-cost tool for identifying illegal tapping |
| | OC435 - Detection of flaws in austenitic | | OC174 - NDE & Sensing Solutions for Pipeline | MPI and FPI | used for fuel theft |
| | stainless steel plate using eddy current testing | | Structural Health Monitoring | | |
| | | | | Radek Salac | Lucas Braga Campos |
| | Helena Ramos | | Bruno Moreira | <u></u> | <u></u> |
| | | | | | |
| 12:30 - 12:50 | S13 - Numerical Simulation, Modeling and Data | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S18 - Oil & Gas |
| | Processing | | Resonance, Vibration Analysis) | OC184 - An analysis of how a software platform can | OC440 - Development of Non-destructive Testing |
| | OC434 - Leveraging Signal Correlation for a | | OC294 - Guided waves based SHM system for | achieve complete digital transformation | Method for Tube Inspection in Fin-Fan Coolers |
| | Multi-variable Model Assisted PoD of Flaws | | rail monitoring and its environmental impact | using Radiographic Testing as an example | in Kazakhstan's Oil/Gas, Chemical and |
| | in Eddy Current NDT | | | | Power Industries. |
| | · | | Bastien Chapuis | Lea Köhler | |
| | <u>Artur Ribeiro</u> | | | | John Hansen |
| | | | | | |
| 12:50 - 14:10 | LUNCH | | | | |
| 14:10 - 14:30 | S9 - Guided Waves | S25 - ACADEMIA INTERNATIONAL RESEARCH DAY | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S11 - Art & Cultural Heritage |
| | OC158 - Addressing non-uniqueness for the | | Resonance, Vibration Analysis) | OC303 - Strategy for NDTE education at | OC20 - Ten+ Years of Experience in Digitization of |
| | tomographic reconstruction of wall thickness | (check detailed programme below - | OC299 - 24/7 monitoring on metallic pressure | universities in France | Cultural Heritage by Means of Industrial X-ray |
| | loss in pipelines. | from 09:00 to 17:10) | equipment, storage tanks and infrastructure | | Computed Tomography: A Summary |
| | | | components with acoustic emission | Serge Dos Santos | |
| | Emiel Hassefras | | | | Theobald Fuchs |
| | | | <u>Gerald Lackner</u> | | |
| | | | | | |
| 14:30 - 14:50 | S9 - Guided Waves | | S15 - Monitoring (SHM, Acoustic Emission, | S2 - NDT Industry 4.0 | S11 - Art & Cultural Heritage |
| | OC193 - Numerical Assessment of Guided Wave | | Resonance, Vibration Analysis) | OC287 - Advanced machine learning for dissimilar | OC87 - Non-Destructive Examination of Metallic Idols |
| | Tomography in a Pipe Bend Based on Full Waveform | | OC410 - CORROSION BASED DEFECT DETECTION AND | metal weld phased array ultrasonic inspection | and Statues in Religious Institutions - A |
| | Inversion | | CLASIFICATION IN PIPE WALL USING MULTIPLE HIGH | T | Case Study |
| | | | ORDER ULTRASONIC GUIDED WAVE MODES | <u>Tuomas Koskinen</u> | Tatas la sala |
| | <u>Carlos Omar Rasgado Moreno</u> | | Desetes Citerates | | <u>Tejas Ingale</u> |
| | | | <u>Donatas Cirtautas</u> | | |
| | | | | | |

| 19:30 | GALA DINNER | | | |
|---------------|---|---|--|-------------------|
| 17:40 - 18:00 | x | x | x | |
| 17:40 - 18:00 | x | × | x | |
| 17:20 - 17:40 | #N/D | #N/D | #N/D | |
| | <u>Ferda Cansu GÜL</u> | | Young-In Hwang | |
| 17:00 - 17:20 | S9 - Guided Waves OC235 - Data-Driven Remaining Useful Life Prognostic for Aeronautical Composite Structures based on Guided Waves | | S14 -Transportation (Railway, Automotive, Marin, Aerospace) OC229 - Assessment of residual stresses in railway rails using ultrasonic and Barkhausen noise techniques | OC431 |
| 17:00 17:20 | OC183 - Modelling guided wave reflection from defects in pipes - an integrated approach <u>Abdul Mateen Qadri</u> | (check detailed programme below - from 09:00 to 17:10) | Aerospace) OC203 - Advanced 3D-TFM Ultrasonic Spot-Weld Inspection <u>Tobias Bruch</u> | OC395 automati |
| 16:40 - 17:00 | S9 - Guided Waves | S25 - ACADEMIA INTERNATIONAL RESEARCH DAY | S14 -Transportation (Railway, Automotive, Marin, | |
| 16:10 - 16:40 | COFFEE-BREAK | | | |
| 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> | |
| | Mathias Kersemans | | Thomas Würschig | |
| | OC286 - Inspection of CFRP Aircraft Components using Guided Wavefield Imaging in Wavenumber-Frequency domain | | Aerospace) OC292 - Adaptive ultrasonic rail wheel testing system with advanced phased array technology | OC394 - |
| 15:30 - 15:50 | <u>Mohsen Barzegar</u> S9 - Guided Waves | | <u>Christian Mathiszik</u> S14 -Transportation (Railway, Automotive, Marin, | |
| 15:10 - 15:30 | S9 - Guided Waves OC249 - Damage imaging and wavenumber mapping for inspection of bonded CFRP plates using ultrasonic guided waves | | S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC28 - Reliable detection of stick welds at resistance spot welding | OC364 - I |
| | <u>Aadhik Asokkumar</u> | | | |
| | tomographic reconstruction images in plate-like structures of aircrafts for SHM application using guided waves | | | 00. |
| 14:50 - 15:10 | S9 - Guided Waves OC208 - Enhancement and comparison of | | #N/D | OC |

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

| 05-Jul-23 | | | | | |
|---------------|--------------|---|--------------|--------------|-----------|
| TIME | AUDITORIUM 2 | AUDITORIUM 3 | AUDITORIUM 6 | AUDITORIUM 8 | ROOM 1.08 |
| 09:00 | x | S25 - Academia International Research Day (AIRD) | x | x | x |
| | | FRONTIERS IN NDT | | | |
| 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? Keynote Presentation - Roman Gr. Maev University of Windsor, Canada | x | x | X |

| S2 - NDT Industry 4.0 | S11 - Art & Cultural Heritage |
|--|--|
| OC192 - NDE 4.0 – Digital Transformation | OC429 - Non-Destructive Testing of Artworks |
| C | - |
| of NDE | from the Artist Cy Twombly |
| | |
| Lennart Schulenburg | Juliana Berthold |
| | |
| | |
| | |
| | |
| S2 - NDT Industry 4.0 | S11 - Art & Cultural Heritage |
| - Unified NDT Inspection Software platform to | OC300 - Active thermography to look beneath the |
| the service of NDE community | surface of a historic German aircraft |
| | |
| Patrick Huot | Julia Frisch |
| Fallick Huol | Julia Flisch |
| | |
| S2 - NDT Industry 4.0 | S11 - Art & Cultural Heritage |
| 4 - Magnetic crawler for welds Visual Testing, | OC222 - Virtual reconstruction of some metal artifacts |
| based on 3D profilometry and 2D | discovered at the Roman auxiliary fort of Cumidava |
| image processing | using combined X-ray microtomography and |
| | microfluorescence |
| Manual I de 11 | micronuorescence |
| <u>Marco Induti</u> | |
| | <u>Ion Tiseanu</u> |
| | |
| #N/D | S11 - Art & Cultural Heritage |
| | OC312 - Laminographic Imaging of a Medieval Panel |
| | |
| | Painting by RoboCT |
| | |
| | Wolfgang Holub |
| | |
| | |
| | |
| | |
| 62 NDT Industry 4.0 | 57 Ultracound (FNAAT Locar Ultraconics Air counled |
| S2 - NDT Industry 4.0 | S7 - Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, |
| 95 - The AutosonicTM, a system for the full | nonlinear) |
| atic inspection of seamless steel and aluminum | |
| gas cylinders industry 4.0 ready. | OC 317 - OLED Glass Substrates Inspection using |
| , , , , , , , , , , , , , , , , , , , | Air-coupled Ultrasonic Testing |
| Luca Scaceabarazzi | An coupled officionic resting |
| <u>Luca Scaccabarozzi</u> | |
| | <u>Bonggyu Ji</u> |
| | |
| S2 - NDT Industry 4.0 | #N/D |
| 31 - Data processing to analyze health state | |
| in X-ray modules | |
| in A ray modules | |
| | |
| Pascal Corbat | |
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| #N/D | #N/D |
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| 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</u> 1, <u>Vjera Krstelj</u> 2 1 President of Academia NDT International, Hungary 2 President of Croatian Engineering Association, Croatia | x | x | X |
| 11:50 - 12:10 | X | Current Status and Challenges of NDE Education at Academic Institutions in the U.S.A. <u>Reza Zoughi</u> Center for Nondestructive Evaluation (CNDE), IOWA State University, U.S.A. | X | x | x |
| 12:10 - 12:30 | x | The UK Research Centre for NDE (RCNDE) – Twenty Years of Delivering Value to Industry <u>Colin Brett</u> RCNDE, United Kingdom | x | x | X |
| 12:30 - 12:50 | X | General Education and Training of NDT Personnel, including NDT Education at Universities in South Africa <u>Manfred Johannes</u> Immediate Past President of SAINT, South Africa | X | X | X |
| 12:50 - 14:10 | LUNCH | | | | |
| 14:10 - 14:30 | X | S25 - Academia International Research Day (AIRD) Experience with an International NDT Master Course in view of Research and Development <u>Uwe Ewert</u> 1, <u>Viktor Lyamkin</u> 2, <u>Christian Boller</u> 1, 3 1 Dresden International University (DIU), Dresden, Germany 2 NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany 3 NDT and Quality Assurance (LZfPQ), Saarland University, Campus Dudweiler, Germany | X | X | X |

| 14:30 - 14:50 | x | Strategy for NDTE Education at Universities in France | x | x | x |
|---------------|--------------|--|---|---|---|
| | | Dhilippo Duyouchollo 1, Dochid El Cueriourez 2 | | | |
| | | Philippe Duvauchelle 1, <u>Rachid El-Guerjouma</u> 2, <u>Serge Dos Santos</u> 3 | | | |
| | | 1 NDT specialized master, INSA, France | | | |
| | | 2 Mechanical Engineering and Acoustic, Le Mans | | | |
| | | University, France | | | |
| | | 3 INSA Centre Val de Loire, France | | | |
| | | | | | |
| | | | | | |
| 14:50 - 15:10 | x | The Role of ASNT in Supporting NDT Education | x | x | x |
| | | and Research in the USA | | | |
| | | Shant Kenderian | | | |
| | | The Aerospace Corporation, ASNT Engineering | | | |
| | | Council, U.S.A. | | | |
| | | | | | |
| 15:10 - 15:30 | x | Strategy for NDT Education at Universities in India | x | x | x |
| | | Krichnan Palasuhramaniam | | | |
| | | <u>Krishnan Balasubramaniam</u> IIT, India | | | |
| | | in, india | | | |
| 15:30 - 15:50 | x | Development and Practical Exploration of NDT | x | x | x |
| | | Education | | | |
| | | at Universities in China | | | |
| | | | | | |
| | | Yongshun Xiao Tsinghua University, China | | | |
| | | Tsinghua University, China | | | |
| 15:50 - 16:10 | x | Strategy for NDE Education at Universities in UK: | x | x | x |
| | | An Integrated Education Programme for | | | |
| | | NDT Professionals | | | |
| | | | | | |
| | | David Gilbert BINDT United Kingdom | | | |
| | | BINDT, United Kingdom | | | |
| 16:10 - 16:40 | COFFEE-BREAK | | | | |
| 16:40 - 17:10 | | Panel Discussion | x | x | x |
| | | | | | |
| | | Shant Kenderian, Younho Cho, Peter Trampus | | | |
| | | Academia NDT International, WG3 ICNDT | | | |
| 17:10 - 17:20 | x | x | x | x | x |
| 17:20 - 17:40 | × | × | 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 2 | AUDITORIUM 3 | AUDITORIUM 6 | AUDITORIUM 8 | ROOM 1.08 | |
| 09:00 - 09:20 | S9 - Guided Waves | S5 - Materials Characterization | S14 - Transportation (Railway, Automotive, Marin, | S2 - NDT Industry 4.0 | S17 - Energy Generation (Fossil, Nuclear and | |
| | OC270 - Use of periodic structures for mode | OC3 - HIGH TEMPERATURE MAGNETIC | Aerospace) | OC120 - A path towards digital industry: | Regenerative Power Generation) | |
| | transformation in cylindrical objects | PROPERTIES OF SELECTED STEEL GRADES | OC250 - In-Service Ultrasonic Wheel Inspection | Airblade grains detection by directional reflectance | OC245 - Development and adaptation of Ultrasonic | |
| | | | thought beyond - New Generation with Focus | technique | system for Windblades inspection | |
| | <u>l Boris</u> | John Wilson | on improved Ergonomics, Digitalization and Operator | | using Unmanned Aerial Vehicles | |
| | | | Support | <u>Clément Remacha</u> | | |
| | | | | | Sergio González | |
| | | | Thomas Würschig | | | |
| | | | | | | |
| 09:20 - 09:40 | S9 - Guided Waves | S5 - Materials Characterization | S14 - Transportation (Railway, Automotive, Marin, | S2 - NDT Industry 4.0 | S17 - Energy Generation (Fossil, Nuclear and | |
| | OC315 - APPLICATIONS OF LINEAR SCANNING | OC105 - Non-destructive magnetic evaluation | Aerospace) | OC53 - Automating 'Image-Based Simulation' | Regenerative Power Generation) | |
| | MAGNETOSTRICTIVE TRANSDUCERS (MST) FOR | of microstructure and mechanical properties | OC82 - Scanning pulse phase thermography for surface | with machine learning for virtual quality assurance in | OC79 - Automated analysis of Baffle Bolts | |
| | FINDING OF HARD TO DETECT ANOMALIES IN | of advanced high-strength steels | defect detection in manganese steel | industrial applications | | |
| | STRUCTURAL COMPONENTS | | turnout frogs | | Javier De La Morena | |
| | | Ane Martinez-de-Guerenu | | Llion Evans | | |
| | Sergey Vinogradov | | Christoph Tuschl | | | |
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| 09:40 - 10:00 | S8 - Ultrasound Phased Arrays OC49 - The effect of ultrasound wave path estimation to defect characterization capability in half-skip total focusing method | S5 - Materials Characterization OC132 - Heat treatment and residual stress characterization by electromagnetic non-destructive methods | S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC419 - Experimental evaluation of metallic ropes magnetisation under magneto-inductive testing | OC129 - G in Type I |
|---------------------------------------|--|--|--|---------------------------|
| | <u>Håkan Wirdelius</u> | <u>Hélène Petitpré</u> | <u>Aldo Canova</u> | |
| 10:00 - 10:20 | S8 - Ultrasound Phased Arrays OC63 - Development of 1024-elements 2D matrix array transducer for high-resolution 3D phased-array imaging in NDE applications <u>Yoshikazu Ohara</u> | S5 - Materials Characterization OC161 - Magnetic NDT of the Microstructure of Steels for Oil and Gas Applications <u>Alasdair Regan</u> | S14 - Transportation (Railway, Automotive, Marin, Aerospace) OC350 - How to Reach 100% Inspection Coverage of Aeroengine Fan Blades with a High Probability of Detection <u>Etienne Grondin</u> | 00 |
| 10:20 - 10:40 | S8 - Ultrasound Phased Arrays OC251 - Innovative Instrument Platforms for Ultrasonic Inspections <u>Johannes Buechler</u> | S5 - Materials Characterization OC172 - Advances in Automated Eddy-Current Characterisation of Carbon Fibre Composites <u>Qiuji Yi</u> | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC29 - Inspection of vaporizers and recuperators in Binary Cycle Geo Thermal Power plant <u>Vignesh Sivanandam</u> | OC413 - |
| 10:40 - 11:10 | COFFEE-BREAK | | | |
| 11:10 - 11:30 | S8 - Ultrasound Phased Arrays OC267 - Assessing the roughness of surfaces with ultrasound arrays <u>Thiago A. R. Passarin</u> | S5 - Materials Characterization OC385 - Can Martensitic Phase Transformation Measured by Magnetic Methods be an Indicator of Fatigue Damage in Austenitic Steel at Elevated Temperature and Thermo-Mechanical Loading? Viktor Lyamkin | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC23 - Process safe automatic evaluation for fast Inline-CT systems <u>Tobias Schön</u> | O Evaluatio using a |
| | | | | |
| 11:30 - 11:50 | S8 - Ultrasound Phased Arrays OC43 - Low Frequency GFRP Imaging with Variable Aperture TFM | S5 - Materials Characterization OC402 - Microchannels produced by Friction Stir Channeling: characterisation with non-destructive testing techniques | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC33 - Unsupervised deep learning for defect detection on CT parts using simulated data | OC12 |
| | <u>Renato Nogueira</u> | Miguel A. Machado | <u>Virginia Florian</u> | |
| 11:50 - 12:10 | S8 - Ultrasound Phased Arrays OC390 - Total Focusing Method (TFM) and Phase Coherence Imaging (PCI) applied to various industrial cases <u>Paul Hillman</u> | S5 - Materials Characterization OC125 - Reliable non-destructive detection and characterization of material degradation caused by high-temperature corrosion <u>Sebastian Barton</u> | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC64 - Optimization of Computed Tomography Data Acquisition by Means of Quantum Computing <u>Theobald Fuchs</u> | OC1 |
| 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> | C |
| 12:30 - 12:50 | S8 - Ultrasound Phased Arrays OC432 - New Real-Time TFM in 1 shot | S5 - Materials Characterization OC162 - Non-Destructive Determination of the Magnetic Properties of Ferritic Steel Strip and Plate | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC362 - Merged Mode TFM with Mode | ОС360 - Т |
| | <u>Christophe Chollet</u> | Products by Open-Circuit Magnetic Measurement <u>Alasdair Regan</u> | Conversion Artifact Suppression <u>Patrick Huot</u> | |
| 12.50 44.40 | | | | |
| <u>12:50 - 14:10</u> 14:10 - 14:30 | LUNCH S8 - Ultrasound Phased Arrays OC4 - Development and Validation Testing of High-Temperature Phased-Array UT Transducers and Wedges for Process Applications | S5 - Materials Characterization OC75 - Estimation of the stiffness tensor from Lamb wave velocity profiles measured on steel with different texture | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC100 - Innovative NDT Technique, for a More Productive Surface Damage Inspection | OC |
| | Steve Strachan | <u>Arno Volker</u> | Francois Lachance | |
| | | | | |

| S2 - NDT Industry 4.0 | S17 - Energy Generation (Fossil, Nuclear and |
|---|--|
| - | |
| Guided wave ultrasonic feature determination | Regenerative Power Generation) |
| e IV composite overwrapped pressure vessels | OC24 - Power Plant Condition Assessment |
| | |
| towards the digital twin | through Engineering, Materials Science, and |
| - | NDT 4.0 |
| | NDT 4.0 |
| Bengisu Yilmaz | |
| <u></u> | |
| | <u>Terry Haigler</u> |
| | |
| | |
| S3 - Robotics and Automation | S17 - Energy Generation (Fossil, Nuclear and |
| C160 Stratogies for pipeline inspection | |
| OC169 - Strategies for pipeline inspection | Regenerative Power Generation) |
| using mobile robots | OC282 - Eddy current response from copper tube |
| 8 | |
| | extrusion laps compared to artificial notches |
| Jie Zhang | |
| <u>sie zinding</u> | |
| | Barend Van Den Bos |
| | |
| | |
| | |
| C2 Dehating and Automation | C17 Energy Conception (Esseil Nuclean and |
| S3 - Robotics and Automation | S17 - Energy Generation (Fossil, Nuclear and |
| 3 - DEKRA Robotized Inspection of Hazardous | Regenerative Power Generation) |
| - | - |
| Areas | OC329 - Investigation on Potential Benefits of Phase |
| | Cohoronco Imaging in Dotoction and Sizing of Stross |
| | Coherence Imaging in Detection and Sizing of Stress |
| <u>Oliver London</u> | Corrosion Cracking in Austenitic Materials Used in the |
| | _ |
| | Nuclear Industry |
| | |
| | |
| | <u>Florin Turcu</u> |
| | _ |
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| | |
| C2 Dobation and Automation | C10 0:10 0 |
| S3 - Robotics and Automation | S18 - Oil & Gas |
| OC7 - Quantitative Measurement and | OC296 - Performance demonstration of AUT Pipeline |
| - | |
| tion of High-Resolution Ultrasonic Sound Fields | girth welds using simulation and the |
| g a Novel Automated Ultrasonic Immersion | new CIVA AUT Pipeline software |
| - | new GivA AUT Fipeline software |
| Scanner | |
| | Stéphane Le Berre |
| | Stephane Le bene |
| Sanjeevareddy Kokoori | |
| | |
| | |
| S3 - Robotics and Automation | S18 - Oil & Gas |
| | |
| C114 - Innovations in ultrasonic inspection | OC330 - Reducing False Calls in HTHA Inspection |
| of forged rings | through Phase Coherence Imaging (PCI) |
| or forged tillgs | through r hase concrence infaging (PCI) |
| | |
| Tobias Gautzsch | <u>Florin Turcu</u> |
| TUDIAS GAULZSUI | |
| | |
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| | |
| S3 - Robotics and Automation | S18 - Oil & Gas |
| | |
| C135 - AUTOMATED MULTI-NDT METHOD | OC191 - Applying Artificial Intelligence (AI) in Digital |
| | Radiography |
| | Ναυιοβιαριιγ |
| Jules Recolin | |
| | Lonpart Cohulophurg |
| | Lennart Schulenburg |
| | |
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| | |
| S3 - Robotics and Automation | S18 - Oil & Gas |
| OC227 - Autonomous Illtrasonia Disa | OC261 - A data-driven method for the correction |
| OC227 - Autonomous Ultrasonic Disc | OCZOL - A data-driven method for the correction |
| inspection System | of optical distortions of depth cameras |
| | |
| | in immersion NDT |
| Michael Bron | |
| | |
| | Thiago A. R. Passarin |
| | |
| | |
| S3 - Robotics and Automation | #N/D |
| | |
| - The use of Robotic Solutions for inspection of | |
| Unpiggable Pipelines | |
| | |
| | |
| Michel Bezemer | |
| | |
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| S3 - Robotics and Automation | |
| 55 - Robolics and Automation | #N/D |
| | #N/D |
| | #N/D |
| C378 - A Freely Positionable Dual-Robot | #N/D |
| C378 - A Freely Positionable Dual-Robot System for Automated NDT of Large | #N/D |
| C378 - A Freely Positionable Dual-Robot | #N/D |
| C378 - A Freely Positionable Dual-Robot System for Automated NDT of Large | #N/D |
| DC378 - A Freely Positionable Dual-Robot System for Automated NDT of Large Lightweight Structures | #N/D |
| C378 - A Freely Positionable Dual-Robot System for Automated NDT of Large | #N/D |
| DC378 - A Freely Positionable Dual-Robot System for Automated NDT of Large Lightweight Structures | #N/D |

| 14:30 - 14:50 | | | | |
|--------------------------------|---|--|---|--|
| | S8 - Ultrasound Phased Arrays OC220 - Temperature and geometry impact on defect detection and sizing | S5 - Materials Characterization OC238 - Orthotropic stiffness characterization using guided wavefield data and | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC131 - Novel concepts for automatic | OC10 - Νι |
| | Pavel Mares | machine learning <u>Adil Han Orta</u> | inspection of railway tracks <u>Stephan Falter</u> | |
| | | | | |
| 14:50 - 15:10 | S8 - Ultrasound Phased Arrays OC269 - Ultrasonic sectorial inspection in the presence | S5 - Materials Characterization OC374 - Study of the crystallization behaviour | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) | |
| | of temperature gradients | of phase change materials by in-situ X-ray computed | OC291 - Thermographic detection of internal defects | |
| | | tomography | using photothermal super resolution reconstruction | |
| | Thiago A. R. Passarin | | and 2D-structured illumination patterns | |
| | | Jorge Martinez Garcia | Julien Lecompagnon | |
| | | | | |
| 15:10 - 15:30 | S8 - Ultrasound Phased Arrays | S5 - Materials Characterization | S22 - New and Disruptive Methods (Sensor Concepts, | |
| | OC351 - Ultra-Fast Wall Remaining Thickness Measurements & Reporting | OC299 - Layer thickness measurement of ceramic systems with a numerical model for flash | Algorithmics, Methods Combination) OC278 - Visual color inspection with a hyperspectral | OC3 |
| | Measurements & Reporting | thermography | camera: inline application for automotive parts | |
| | Guillaume Ithurralde | | production | |
| | | Julia Frisch | | |
| | | | Eduardo Assunção | |
| 15:30 - 15:50 | S8 - Ultrasound Phased Arrays | S5 - Materials Characterization | S22 - New and Disruptive Methods (Sensor Concepts, | |
| | OC170 - In-process Monitoring and Control of Multi- | OC144 - Deep Learning Approach for Multi-Class | Algorithmics, Methods Combination) | OC29 |
| | Pass Fusion Welding Using Phased Arrays | Segmentation in Industrial CT-Data | OC46 - AI-based non-destructive weld seam testing in the field of passive thermography | metho |
| | Nina Sweeney | Tim Schanz | testing in the new of passive thermography | |
| | | | Patrick Kammel | |
| 15:50 - 16:10 | S8 - Ultrasound Phased Arrays | S5 - Materials Characterization | S22 - New and Disruptive Methods (Sensor Concepts, | |
| | OC218 - Detection of defects initiation | OC145 - Generative Synthesis of Defects in Industrial | Algorithmics, Methods Combination) | OC219 - I |
| | in weld joints | Computed Tomography Data | OC213 - Artificial Intelligence for Assisted Analysis of | |
| | Pavel Mares | Robin Tenscher-Philipp | Eddy Current Data from Heat Exchangers with Non- | an |
| | Paver Mares | <u>Kobin Tenscher-Philipp</u> | Ferromagnetic Tubes | |
| | | | Marco Michele Sisto | |
| 16:10 - 16:40 | COFFEE-BREAK | | | |
| 16:40 - 17:00 | S8 - Ultrasound Phased Arrays OC359 - On the Use of Asymmetrical DMA Probe | S21 - Food & Agriculture OC363 - Monitoring of water distribution in | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) | S24 - C |
| | Assemblies for PA UT Inspection of Tapered Dissimilar | meat upon freezing with X-ray | OC65 - Digital radiography by counting photons: | OC325 |
| | Metal Weld Configurations | computed tomography | innovative solution for testing very thick parts | Arr |
| | Paul Hillman | Philipp Schütz | Angela Peterzol | |
| | | | | |
| 17:00 - 17:20 | S8 - Ultrasound Phased Arrays OC372 - A High-Speed Ultrasound Full-Matrix Capture | S5 - Materials Characterization OC276 - High-resolution imaging of magnesium | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) | S24 - C |
| | Acquisition System for Robotic Weld Inspection | feedstock material for Wire Arc Additive | OC353 - Sub-second X-ray tomography using MetalJet | OC18 |
| - | | Manufacturing (WAAM) | X-ray sources | |
| | Marain Lawandawaki | | | Pe |
| | Marcin Lewandowski | Sascha Senck | Emil Espes | Pe |
| | | Sascha Senck | Emil Espes | |
| 17:20 - 17:40 | S8 - Ultrasound Phased Arrays | S5 - Materials Characterization | S22 - New and Disruptive Methods (Sensor Concepts, | |
| 17:20 - 17:40 | | S5 - Materials Characterization OC80 - Monitoring crack tip position in | | S24 - C |
| 17:20 - 17:40 | S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification | S5 - Materials Characterization | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) | Pe S24 - C OC4 and t |
| 17:20 - 17:40 | S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification | S5 - Materials Characterization OC80 - Monitoring crack tip position in Cracked Lap Shear specimens subjected to fatigue loading | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC449 - ELECTRICAL CONDUCTIVITY AND THICKNESS | S24 - C OC4 |
| 17:20 - 17:40 | S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification of ultrasound phased array systems | S5 - Materials Characterization OC80 - Monitoring crack tip position in Cracked Lap Shear specimens subjected | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC449 - ELECTRICAL CONDUCTIVITY AND THICKNESS ESTIMATION BASED ON DIMENSION | S24 - C OC4 |
| | 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 - C OC4 and t |
| 17:20 - 17:40 17:40 - 18:00 | S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification of ultrasound phased array systems <u>Benoit Dupont</u> S8 - Ultrasound Phased Arrays | S5 - Materials Characterization OC80 - Monitoring crack tip position in Cracked Lap Shear specimens subjected to fatigue loading <u>Michele Carboni</u> S5 - Materials Characterization | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC449 - ELECTRICAL CONDUCTIVITY AND THICKNESS ESTIMATION BASED ON DIMENSION ANALYSIS IN EDDY CURRENT TESTING Antonello Tamburrino S22 - New and Disruptive Methods (Sensor Concepts, | S24 - C OC4 |
| | 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 - C OC4 and t S24 - C |
| | S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification of ultrasound phased array systems <u>Benoit Dupont</u> S8 - Ultrasound Phased Arrays OC442 - Robot-based spot weld | S5 - Materials Characterization OC80 - Monitoring crack tip position in Cracked Lap Shear specimens subjected to fatigue loading <u>Michele Carboni</u> S5 - Materials Characterization OC37 - INFLUENCE OF BIAXIAL STRESS ON MAGNETIC | 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> S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) | S24 - C OC4 and t S24 - C |
| | S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification of ultrasound phased array systems Benoit Dupont S8 - Ultrasound Phased Arrays OC442 - Robot-based spot weld inspection - almost couplant-free, imaging phased | S5 - Materials Characterization OC80 - Monitoring crack tip position in Cracked Lap Shear specimens subjected to fatigue loading <u>Michele Carboni</u> S5 - Materials Characterization OC37 - INFLUENCE OF BIAXIAL STRESS ON MAGNETIC | 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> S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC289 - Resonant Inductive Arrays for Non-Destructive Testing Applications | S24 - C OC4 and t S24 - C OC52 |
| | S8 - Ultrasound Phased Arrays OC104 - Towards a simplified verification of ultrasound phased array systems <u>Benoit Dupont</u> S8 - Ultrasound Phased Arrays OC442 - Robot-based spot weld inspection - almost couplant-free, imaging phased array based inspection with PHAsis, integrated and | S5 - Materials Characterization OC80 - Monitoring crack tip position in Cracked Lap Shear specimens subjected to fatigue loading <u>Michele Carboni</u> S5 - Materials Characterization OC37 - INFLUENCE OF BIAXIAL STRESS ON MAGNETIC BEHAVIOR OF HOT- ROLLED STEELS | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC449 - ELECTRICAL CONDUCTIVITY AND THICKNESS ESTIMATION BASED ON DIMENSION ANALYSIS IN EDDY CURRENT TESTING Antonello Tamburrino S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) OC289 - Resonant Inductive Arrays for Non-Destructive | S24 - C OC4 and t S24 - C OC52 |

| S3 - Robotics and Automation | #N/D |
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| Nuclear RPV inspection with multiple ROV:s for | |
| shorter inspection time | |
| | |
| Peter Merck | |
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| S3 - Robotics and Automation | #N/D |
| OC139 - Novel automatic inspections | |
| | |
| Jose Luis Lanzagorta | |
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| S3 - Robotics and Automation | #N/D |
| C366 - Automatic Methods for Ultrasonic | |
| Scanning Paths Generation | |
| | |
| Michel Brassard | |
| | |
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| | |
| S3 - Robotics and Automation | #N/D |
| 290 - Automated misalignment correction | |
| hod for ultrasonic inspection of CFRP parts | |
| | |
| Alexandre Beausoleil | |
| | |
| | |
| S3 - Robotics and Automation | #N/D |
| - High-speed, multi-zone ultrasonic inspection | |
| of bar and wire stocks with | |
| n in-line phased array inspection system | |
| | |
| Thomas Würschig | |
| | |
| | |
| | |
| - Qualification, certification, standards and | |
| training | |
| 25 - Standard development for Eddy Current | |
| rrays in lieu of Magnetic Particle Testing | |
| | |
| | |
| Casper Wassink | |
| | |
| - Qualification, certification, standards and | |
| - Qualification, certification, standards and training | |
| - Qualification, certification, standards and training 189 - Qualification and Certification of NDT | |
| - Qualification, certification, standards and training | |
| - Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) | |
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| - Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> | |
| - Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> - Qualification, certification, standards and | |
| - Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> - Qualification, certification, standards and training | |
| - Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> - Qualification, certification, standards and training C418 - The conversion from film to digital | |
| Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> Qualification, certification, standards and training C418 - The conversion from film to digital d the revision of ISO 17636-2, weld testing, | |
| - Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> - Qualification, certification, standards and training C418 - The conversion from film to digital | |
| Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> Qualification, certification, standards and training C418 - The conversion from film to digital d the revision of ISO 17636-2, weld testing, with digital radiography | |
| Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> Qualification, certification, standards and training C418 - The conversion from film to digital d the revision of ISO 17636-2, weld testing, | |
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| Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> Qualification, certification, standards and training C418 - The conversion from film to digital d the revision of ISO 17636-2, weld testing, with digital radiography <u>Uwe Zscherpel</u> Qualification, certification, standards and | |
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| Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> Qualification, certification, standards and training C418 - The conversion from film to digital d the revision of ISO 17636-2, weld testing, with digital radiography <u>Uwe Zscherpel</u> Qualification, certification, standards and | |
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| Qualification, certification, standards and training 189 - Qualification and Certification of NDT Personnel in Civil Engineering (NDT-CE) <u>Sascha Feistkorn</u> Qualification, certification, standards and training C418 - The conversion from film to digital d the revision of ISO 17636-2, weld testing, with digital radiography <u>Uwe Zscherpel</u> Qualification, certification, standards and training 52 - Enhancing the NDE training at the light | |

| 18:00 - 18:20 | S8 - Ultrasound Phased Arrays | S9 - Guided Waves | S22 - New and Disruptive Methods (Sensor Concepts, | |
|---------------|---|---|---|------|
| | OC68 - Inspection for non-planar shaped welded joints | OC122 - Guided Waves Propagation in | Algorithmics, Methods Combination) | OC27 |
| | of pipes using FMC ultrasonic technique | Composite Overwrapped Pressure Vessel | OC373 - Application of magnetic recording method to | |
| | | Towards the Design of a Sensor Network for Structural | the non-destructive evaluation of | |
| | Sho Yamaguchi | Health Monitoring | ferromagnetic structures | |
| | | Samir Mustapha | Tomasz Chady | |

DAY 5 - FRIDAY, 7 JULY 2023

| TIME | | | | |
|---|--|---|---|---|
| | AUDITORIUM 2 | AUDITORIUM 3 | AUDITORIUM 6 | |
| 09:00 - 09:20 | | S5 - Materials Characterization | Joint EFNDT-ICNDT Workshop: | S23 - NI |
| | OC340 - Overview of NDT Array Techniques Applied to | | Training, Qualification and Certification – the | OC143 - Comparis |
| | Inspection of Rolling Stock | online monitoring of steel-making process | new 9712 and more | calculations |
| | Giovanni Corti | Christophe Reboud | | |
| | | | | B |
| | | | | |
| 09:20 - 09:40 | S8 - Ultrasound Phased Arrays OC268 - Parametric reconstruction of | S5 - Materials Characterization | | S23 - NI |
| | surfaces for ultrasound immersion imaging | OC48 - How the EU project "Online Microstructure Analytics" advances inline sensing of | | OC266 - Re Thinnin |
| | surfaces for ultrasound initialision inlaging | microstructure during steel manufacturing | | |
| | Thiago A. R. Passarin | с с | | |
| | | <u>Frenk Van Den Berg</u> | | |
| 09:40 - 10:00 | S8 - Ultrasound Phased Arrays | S5 - Materials Characterization | | S23 - N |
| 05.40 - 10.00 | OC71 - Automated inspection of heavy plates | OC38 - MAGNETOSTRICTIVE BEHAVIOR OF | | OC426 - Inspec |
| | with phased-array based porosity testing | HOT-ROLLED STEELS | | Optical Solar F |
| | | | | |
| | <u>Andreas Knam</u> | <u>Olivier Hubert</u> | | |
| 10:00 - 10:20 | S8 - Ultrasound Phased Arrays | S5 - Materials Characterization | | S23 - NI |
| | OC295 - Automated IBEX crawler for PAUT inspection | OC422 - EDDY CURRENT FALSE INDICATIONS IN | | OC281 - High ene |
| | for in-service ferromagnetic assets | AUSTENITIC STEEL AND TITANIUM ALLOYS HEAT | | density alloys u |
| | Natalia Marcial | EXCHANGER TUBES ACTIVATED BY STRESS | | detectability |
| | | Valentyn Uchanin | | |
| | | | | |
| 10:20 - 10:40 | | #N/D | | |
| | OC84 - Comparative study of advanced image | | | |
| | reconstruction algorithms for complex arbitrary components | | | |
| | and any components | | | |
| | | | | |
| | <u>Sumana Sumana</u> | | | |
| 10:40 - 11:10 | Sumana Sumana COFFEE-BREAK | | | |
| | COFFEE-BREAK S8 - Ultrasound Phased Arrays | #N/D | Joint EFNDT-ICNDT Workshop: | |
| | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex | #N/D | Training, Qualification and Certification – the | OC216 - Introduc |
| | COFFEE-BREAK S8 - Ultrasound Phased Arrays | #N/D | - | OC216 - Introduc the acou |
| 10:40 - 11:10 11:10 - 11:30 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry | #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acou |
| | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex | #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acou |
| 11:10 - 11:30 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> | | Training, Qualification and Certification – the | OC216 - Introduc the acou reflect |
| 11:10 - 11:30 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> S8 - Ultrasound Phased Arrays | #N/D #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acou reflect S23 - NI |
| | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve | | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> S8 - Ultrasound Phased Arrays | | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. | | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for | | Training, Qualification and Certification – the | OC216 - Introduc the acou reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. | | Training, Qualification and Certification – the | S23 - NI OC216 - Introduc the acoureflect S23 - NI OC21 - USING FOR RI |
| 11:10 - 11:30 11:30 - 11:50 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> 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 | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry Matt Chandler Matt Chandler S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. Paul Hillman S8 - Ultrasound Phased Arrays | #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> 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> S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging | #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry Matt Chandler Matt Chandler S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. Paul Hillman S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation | #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 11:50 - 12:10 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> 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> S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging | #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 11:50 - 12:10 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> Matt Chandler S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. Paul Hillman S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging <u>Guillermo Cosarinsky</u> S8 - Ultrasound Phased Arrays OC262 - Full Waveform Inversion for NDT using | #N/D #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 11:50 - 12:10 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> 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> S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging <u>Guillermo Cosarinsky</u> S8 - Ultrasound Phased Arrays | #N/D #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acoureflect reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry Matt Chandler S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. Paul Hillman S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging Guillermo Cosarinsky S8 - Ultrasound Phased Arrays OC262 - Full Waveform Inversion for NDT using ultrasonic linear arrays | #N/D #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acou reflect S23 - NI OC21 - USING |
| 11:10 - 11:30 11:30 - 11:50 11:50 - 12:10 | COFFEE-BREAK S8 - Ultrasound Phased Arrays OC99 - Ultrasonic Inspection for Complex Geometry <u>Matt Chandler</u> Matt Chandler S8 - Ultrasound Phased Arrays OC404 - Leveraging automated tools to achieve a new level of efficiency and performance for pipe girth weld inspection. Paul Hillman S8 - Ultrasound Phased Arrays OC121 - Time of flight fast approximation method for ultrasound sub-surface imaging <u>Guillermo Cosarinsky</u> S8 - Ultrasound Phased Arrays OC262 - Full Waveform Inversion for NDT using | #N/D #N/D | Training, Qualification and Certification – the | OC216 - Introduc the acou reflect S23 - NI OC21 - USING |

| S23 - NDT Reliability and Statistic | |
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| 272 - A POD approach by simulation of an | |
| industrial ultrasonic inspection | |
| Benoit Dupont | |
| | |
| | |

| AUDITORIUM 8 | ROOM 1.08 |
|---|-----------|
| S23 - NDT Reliability and Statistic | |
| - Comparison of hit/miss and 'â versus a' POD | |
| alculations for short surface cracks using | |
| inductive thermography | |
| Beate Oswald-Tranta | |
| S23 - NDT Reliability and Statistic | |
| OC266 - Reliability Analysis of Pipe Wall | |
| Thinning based on Quantification | |
| of Ultrasonic Testing | |
| Kantaro Ikeda | |
| S23 - NDT Reliability and Statistic | |
| 26 - Inspectability and POD Investigation for | |
| ical Solar Reflector Bonded Satellite Panels | |
| | |
| <u>Utku Şahin</u> | |
| S23 - NDT Reliability and Statistic | |
| - High energy Computed Tomography of high | |
| sity alloys using a 6 MeV Linear Accelerator: | |
| tectability and use of Artificial Intelligence | |
| <u>Stefano Benuzzi</u> | |
| #N/D | |
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| S23 - NDT Reliability and Statistic | |
| - Introduction of a certification procedure for | |
| the acoustic response of reference | |
| reflectors for ultrasonic testing | |
| | |
| Thomas Würschig | |
| S23 - NDT Reliability and Statistic | |
| 1 - USING MODELLING AND METAMODELS | |
| FOR RELIABILITY STUDY IN NDE | |
| | |
| Fabrice Foucher | |
| | |
| #N/D | |
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| CLOSING CEREMONY | Λ |

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

POSTERS / 3 - 7 JULY 2023

| POSTERS Full Day | EXHIBITION & NETWORKING AREA | | | | | |
|---------------------|--|---|---|--|---|---|
| 3-7 Jul 2023 | S1 - Additive Manufacturing P9 - Digital Twin for Robot Based Computed Tomography <u>Frank Herold</u> | S1 - Additive Manufacturing P160 - Ultrasonic Array Testing Method for Validation of Aeronautical Components in Aluminium Alloys Produced by Additive Manufacturing <u>Carla Sofia Proença</u> | S1 - Additive Manufacturing P279 - Application of Non-destructive Testing in Quality Control of Manufactured Aluminium Metal Matrix Composite Components for the Automotive Industry <u>Carla Sofia Proença</u> | S1 - Additive Manufacturing P311 - Evaluating Capacitive Imaging for Powder Bed Fusion Metal Additive Manufacturing <u>Luís Rosado</u> | S1 - Additive Manufacturing P333 - Quality Control Using Ultrasonic Phased Array Inspection of Components Produced by Directed Energy Deposition in Ti6Al4V Alloy <u>Carla Sofia Proença</u> | S20 - Green & Echo Technology P30 - Evaluation of glycerol speed of sound <u>Jaime Batista Santos</u> |
| | S5 - Materials Characterization P149 - STATE OF AGING CLASSIFICATION OF MODIFIED- HP STEEL TUBES BY EDDY CURRENT TEST APLYING MACHINE LEARNING <u>Ana Carolina Brandão</u> | S5 - Materials Characterization P230 - Temperature-Controlled in-situ Tensile Tests of Polymer Tape with Single Particles <u>Sarah Heupl</u> | S5 - Materials Characterization P391 - Grinding burn classification with surface Barkhausen noise measurements <u>Suvi Santa-Aho</u> | S6 - Microwave, Terahertz, and Infrared P90 - THz computed tomography for non-destructive testing <u>Elisabeth Leiss-Holzinger</u> | S6 - Microwave, Terahertz, and Infrared P233 - Hand Lay Up process monitoring by Infrared Thermography <u>Sergio González</u> | S15 - Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) P379 - Hybrid system development and application research for refrigerant leak inspection <u>Yeongil Choi</u> |
| | S2 - NDT Industry 4.0 P376 - Deep learning-based algorithms for ultrasound structural health monitoring in nuclear power plants' hazardous work conditions <u>Marko Budimir</u> | S2 - NDT Industry 4.0 P403 - Ultrasonic Spot Weld inspection system based on Industrial Robotic, Artificial Intelligence and Artificial Vision <u>Montserrat Acebes</u> | S2 - NDT Industry 4.0 P405 - Synchronism system for generating ultrasonic images of complex geometry pieces using industrial robots <u>Montserrat Acebes</u> | S2 - NDT Industry 4.0 P381 - Wheel and axle defect detection based on deep learning <u>Jian Ping Peng</u> | S4 - NDT of Composites P96 - Quality Control of Composite parts by robot guided Terahertz imaging <u>Elisabeth Leiss-Holzinger</u> | S23 - NDT Reliability and Statistic P388 - Value Generation: Non-Destructive Testing – How to generate value with testing <u>Vamsi Krishna Rentala</u> |
| | S22 - New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) P346 - AI in NDT - How digitalization is leading towards an automated future in NDT <u>Dominik Nestler</u> | S13 - Numerical Simulation, Modeling and Data Processing P180 - Analysis of formation processes of informative features in eddy current probes with pulsed excitation mode <u>Iuliia 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 | ΤΟΡΙΟ |
|---------------------------|---|
| S1 | Additive Manufacturing |
| S2 | NDT Industry 4.0 |
| S3 | Robotics and Automation |
| S 4 | NDT of Composites |
| S 5 | Materials Characterization |
| S6 | Microwave, Terahertz, and Infrared |
| S7 | Ultrasound (EMAT, Laser Ultrasonics, Air-coupled, nonlinear) |
| S8 | Ultrasound Phased Arrays |
| S 9 | Guided Waves |
| S10 | Micro & Nano Technology and High-Resolution NDT |
| S11 | Art & Cultural Heritage |
| S12 | Surface Methods (MPI & PT) |
| S13 | Numerical Simulation, Modelling and Data Processing |
| S14 | Transportation (Railway, Automotive, Marine, Aerospace) |
| S15 | Monitoring (SHM, Acoustic Emission, Resonance, Vibration Analysis) |
| S16 | NDE & NDT of Civil Infrastructure, Structural Engineering and Materials |
| S17 | Energy Generation (Fossil, Nuclear and Regenerative Power Generation) |
| S18 | Oil & Gas |
| S19 | Biomedical Technology |
| S20 | Green & Echo Technology |
| S21 | Food & Agriculture |
| th E &?? DT 20 | New and Disruptive Methods (Sensor Concepts, Algorithmics, Methods Combination) |

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

LEGEND:

| S | Session of the Conference Topic |
|----|---------------------------------|
| OC | Oral Communication |
| Р | Poster |