

## **Session Program**

**29 June 2026 to 3 July 2026**



# **The 18th International Conference on Quantitative InfraRed Thermography**

## **Poster**

University of Naples Federico II Conference Center  
Via Partenope, 36, Naples, Italy

## Thursday 2 July

14:30

### Poster

#### Poster Session

#### **Assessing Body Thermoregulation under Localized Cold Stress Using MWIR and LWIR Thermography**

**Speaker**

Fumin Wang

#### **Adaptive Multi-Domain Fusion for Enhanced Defect Detectability in Active Infrared Thermography**

**Speaker**

Stefano Sfarra

#### **Photothermal characterization of natural dye materials for high-performance photonic devices using QIRT**

**Speaker**

Prof. Haitham ALTameemi

#### **Thermal Response Modelling and QIRT Characterization of Natural Dye-Nanomaterial Hybrid Films for Photothermal Sensor Applications**

**Speaker**

Prof. Maha Al-Hamadani

#### **Thermal Performance of Eco-Friendly Mortars with Recycled Aggregates and Supplementary Cementitious Materials**

**Speaker**

Tiziana Cardinale

#### **Infrared thermography for In-Process TIG welding supervision using unsupervised anomaly detection with a convolutional autoencoder**

**Speaker**

Wojciech Jamrozik

#### **LIQUID CRYSTAL LOCK-IN THERMOGRAPHY FOR MEASURING THE THERMAL DIFFUSIVITY OF SOLIDS**

**Speakers**

Dr ADRIAN FELIPE BEDOYA PÉREZ, Mr ALEJANDRO BARRO VÁZQUEZ, Dr ERNESTO MARÍN MOARES

#### **Thermographic Identification of Oxidation State on Stainless Steel Surfaces During and After Welding with a Moving Heat Source**

**Speaker**

Bernard Wyględacz

#### **Infrared microthermography as a tool to study ice behavior in beef**

**Speaker**

Dr Heidi L. Busse

#### **HEAT CONDUCTION TO THE SURROUNDING GAS IN BACK DETECTION LASER-SPOT LOCK-IN THERMOGRAPHY STUDIED USING FINITE ELEMENT MODELING**

**Speakers**

Dr ADRIAN FELIPE BEDOYA PEREZ, Mr Eric Rodríguez

**Thermographic method for testing of the gas turbine engine blades****Speaker**

Dr Stanislav Donets

**Yet another transformation: Experimenting on the Legendre Transform as a processing tool in Pulse IR Thermography****Speaker**

Giovanni Ferrarini

**Internal Defect Evaluation for Thermal Protection Composites Using Infrared Thermography and Microwave Near-Field Reflection****Speaker**

Dr Mingyu Gao

**Thermal characterization of microwave power amplifier GaN HEMT ICs using infrared thermography****Speaker**

Konstantin Petrosyants

**Advanced Infrared Thermographic Image Processing for quantitative Non-Destructive Detection of Subsurface Defects in Aluminum plates****Speaker**

Sara Afouzar

**Experimental characterization of the effect of acceleration on the performance of additively manufactured loop heat pipes using infrared thermography****Speakers**

Delphine Laboureur, Aude Lecardonnel

**Thermal Imaging-Based Thyroid Tumor Classification via Transfer Learning****Speaker**

Francesco Romano

**Pixel-Level Infrared Thermography Data Enhancement Strategy for Aerospace Carbon Fiber Reinforced Polymer****Speaker**

Fumin Wang

**Potential and challenges of applying infrared thermography in dairy farming****Speaker**

Prof. Tina Bobić

**Infrared thermography for non-invasive monitoring of swimmers' body temperature after ice swimming****Speaker**

Mr Arkadiusz Hulewicz

**Advancements in Accelerated Monte Carlo Ray Tracing for Infrared Image Simulation: Application to Wall Monitoring in Fusion Devices****Speaker**

Hugo Bec

**Spatial and temporal characterization of halogen lamps for active infrared thermography. Application to thickness evaluation.**

**Speaker**

Olivier Ghibaudo

**Environmental Impact Assessment Using a Hierarchical Multi-Scale Framework Based on Quantitative Infrared Thermography: A Case Study on Avernus Lake**

**Speaker**

Dr Mohammed Ajaoud

**Towards Generalizable Crack Segmentation in Laser Thermography using Foundation Models**

**Speaker**

Bilal Rahou

**Optical Fiber Breakpoint Detection in Drop Cables Using Lock-in Thermography with Low Optical Input Power**

**Speaker**

Tomokazu Oda

**Experimental observation of the group velocity of thermal waves propagating in various materials**

**Speaker**

Kosuke Nishida

**Linking Coal Fracture Networks to Thermal Recovery Dynamics Under Water Cooling**

**Speaker**

Mrityunjay Jaiswal

**Active thermographic large-area inspection using periodic scanning heating and phase image transformation**

**Speaker**

Itsuki Kanetani

**Improving Meltpool Monitoring Reliability with Deep Segmentation of Infrared Thermographic Data**

**Speaker**

Iago Gil Cortés

**ENHANCED DEFECT CONTRAST USING VORTEX CROSS-CORRELATION IN MULTI-DIRECTIONAL EDDY CURRENT LOCK-IN THERMOGRAPHY**

**Speaker**

Dr Angel Cifuentes

**Initial tests to characterize thermal metamaterials in microscopic local motion and macroscopically stationary**

**Speaker**

Dr Thomas Lahens

**Active Microwave Thermography for Lymphedema Diagnostics**

**Speakers**

Daniel Fehr, Dr Fabrizio Spano, Prof. Mathias Bonmarin

**Optimizing Defect Detection in Mild Steel Using Colour Temperature Control in Infrared Thermography**

**Speaker**

Suresh Bhambhu

**Interpretation of Building Façades from Thermal Images**

**Speaker**

Petra Bagavac

**Extraction of Quantitative Indices from Infrared Imaging in patients with Type 2 Diabetes Mellitus: A Case Study**

**Speakers**

Dr Crescencio García-Segundo, Dr Rosalinda Ortiz\_Sosa

**Advances in Pain Assessment by using Thermography: FITI-PAIN Project**

**Speaker**

Prof. Rosario Morello

16:30