

Tuesday, 25 March 2025	
07:30 - 08:15	Registration
8:30 - 9:30	ETC Invite Lecture #2 Titel Presenter <i>Company</i>
9:30 - 10:00	Coffee break and Registration Elevator Pitches
10:00 - 10:15	Conference Chair Welcome Ralf Obertacke, President EVI-GTI Welcome to Hannover
10:15 - 10:30	Elevator Pitches: 5 x 3 Minutes Company and Product Presentations Chair: Ralf Obertacke
10:30 - 12:30	Session D - 04 Chair: Hanspeter Zinn Aerodynamic and Vibration Measurements
30 min. 10:30-11:00	4.1 E25-01 Turbocharged Innovation: Exploring Advanced Aerodynamic Measurement in Turbomachinery Katharina Kreitz <i>Vectoflow GmbH, Germany</i>
30 min. 11:00-11:30	4.2 E25-39 We make a Turbine speak and this physics based with hybrid modelling Jagannath Marathi, <i>Bosch Digital Twin Industries, Germany</i>
30 min. 11:30-12:00	4.3 E25-28 Source localisation measurements with microphone arrays on turbofan and open rotor engines Henri Siller <i>German Aerospace Center (DLR), Institute of Propulsion Technology, Germany</i>
30 min. 12:00-12:30	4.4 E25-20 Visualization system for the contact behavior in turbine shrouds during operation Stefan von Hößlin <i>MTU Aero Engines AG, Germany</i>
12:30 - 14:00	Lunch
14:00 - 16:00	Session D - 05 Chair: Björn Karlsson Temperature and combustion measurement
30 min. 14:00-14:30	5.1 E25-34 Total Temperature Measurement with High Density FBG Sensor Array Andreas Zeisberger, Andrea Stadler, Johannes Roths <i>Photonics Laboratory, Munich University of Applied Sciences, Germany MTU Aero Engines AG, Germany</i>
30 min. 14:30-15:00	5.2 E25-16 IR Camera Measurements During Engine Delivery Tests of an SGT-750 Gas Turbine Engine Andreas Lantz <i>Siemens Energy AB, Sweden</i>
30 min. 15:00-15:30	5.3 E25-19 UCTS: Technical Update 2025 Anastasia Thomas <i>LGTechLink, US</i>
30 min. 15:30-16:00	5.4 E25-10 Data Acquisition and Process Control in Optically Accessible Combustion Test Rig for Next-Generation Fuels Otto Gansner <i>PI Electronics AG, Switzerland</i>
16:00 - 16:30	Coffee break
16:30 - 18:00	Session D - 06 Ralf Obertacke Novel Rigs and Methods I
30 min. 16:30-17:00	6.1 E25-32 Virtual Sensing for Rocket Engine Turbines Sarah Kramer, Louis Souverein, Stefan Schlechtriem <i>ArianeGroup GmbH, Munich, Germany</i> <i>Institute of Space Systems, University of Stuttgart, Germany</i> <i>Institute of Space Propulsion, German Aerospace Center (DLR), Lampoldshausen, Germany</i>
30 min. 17:00-17:30	6.2 E25-29 Aerothermodynamic turbine tests at DLR Frank Kocian <i>German Aerospace Center (DLR), Institute of Propulsion Technology, Germany</i>
30 min. 17:30-18:00	6.3 E25-30 Experimental Validation of Hydrogen Burners at realistic Aero Engine Conditions Bertram Janus <i>DLR, Germany</i>
Wednesday, 26 March 2025	
8:30 - 9:30	ETC Invite Lecture #3 Titel Presenter <i>Company</i>
9:30 - 10:00	Coffee break
10:00 - 12:30	Session D - 07 Chair: Björn Karlsson Fast Dynamic Pressure Measurement
30 min. 10:00-10:30	7.1 E25-11 Applications and development update - optical pressure and temperature instrumentation Ian Macafee <i>WIKA Optical Sensing Ltd, United Kingdom</i>
30 min. 10:30-11:00	7.2 E25-09 Packaging and Integration Concept for Surface Pressure Measurement on Airfoils Jürgen Gründmayer <i>MTU Aero Engines AG, Germany</i>

30 min. 11:00-11:30	7.3 E25-21 AI-based Condition Monitoring of Gas Turbine Combustors Using Fast Dynamic Pressure Sensor Data Daniel Hümmer, Jakob Hermann <i>IFTA Ingenieurbüro für Thermoakustik GmbH, Germany</i>
30 min. 11:30-12:00	7.4 E25-15 Verification of dynamic pressure sensors in hot environment Jonas Deurell <i>Siemens Energy AB, Sweden</i>
30 min. 12:00-12:30	7.5 E25-17 Fast Response Aerodynamic Probe: Design, Sensor Integration & First Time Application (FTA) Jan Mihalyovics <i>Siemens Energy Global GmbH & Co, Germany</i>
12:30 - 14:00	Lunch
14:00 – 16:00	Session D - 08 Chair: Andreas Zeisberger Experimental and measuring techniques
30 min. 14:00-14:30	8.1 ETC2025-270 Non-Reactive Experimental Analysis of an Exhaust Section downstream of a CVC Panagiotis Gallis, Daniela Anna Misul, Bastien Boust, Marc Bellenoue, Simone Salvadori <i>Department of Energy, Politecnico di Torino, Italy; PPRIME Institute, CNRS-ENSMA-University of Poitiers, France</i>
30 min. 14:30-15:00	8.2 ETC2025-245 Development and Commissioning of the M250-C40B Engine Test Rig Sergio Grasa, Andrew Eifert, Guillermo Paniagua, Tim Unton, Michael Butzen <i>Purdue University; Rolls-Royce North America</i>
30 min. 15:00-15:30	8.3 ETC2025-189 Application of atomic layer thermopile (ALTP) sensors in organic vapor flows Leander Hake, Stefan aus der Wiesche, Simon Kaneider, Tim Rödiger <i>Muenster University of Applied Sciences, Germany; Landshut University of Applied Sciences, Germany</i>
30 min. 15:30-16:00	8.4 ETC2025-160 Test rig design for the aeroacoustic investigation of a 1½-stage low-pressure turbine Johanna Schuler, Niklas Maroldt, Joerg R. Seume <i>Leibniz University Hannover, Institute of Turbomachinery and Fluid Dynamics, Germany</i>
16:00 – 16:30	Coffee break
16:30 – 18:00	Session D - 09 Chair: Ralf Obertacke Novel Rigs and Methods II
30 min. 16:30-17:00	9.1 E25-07 Gas leak detection in oil & gas: improving site reliability and safety using ultrasonic imaging Walter Umbricht <i>Distran-Zürich, Switzerland</i>
30 min 17:00-17:30	9.2 E25-25 The INFRA Rig: Enabling extensive investigations of fan intake interactions Jonas Grubert, Jan Göing <i>Institute of Jet propulsion and Turbomachinery, TU Braunschweig, Germany</i>
30 min. 17:30-18:00	9.3 E25-26 IRON LIQORNE: Issues and Challenges in Monitoring Cryogenic Hydrogen Aviation Fuel Systems Fynn Thilker <i>FH JOANNEUM Gesellschaft mbH, Austria</i>
	Gala Dinner
Thursday, 27 March 2025	
8:30 - 9:30	ETC Invite Lecture #4 Titel Presenter <i>Company</i>
9:30 - 10:00	Coffee break
10:00 - 12:30	Session D - 10 Chair: Hanspeter Zinn Telemetry and dynamic pressure measurement
30 min. 10:00-10:30	10.1 E25-36 A new design approach for a fan telemetry system in flight testing Stefan Gier <i>Rolls-Royce Deutschland, Germany</i>
30 min. 10:30-11:00	10.2 E25-14 Operational experiences with touchless torsional vibration measurements including real SSR-events Ingo Balkowski <i>Siemens Energy Global GmbH & Co, Germany</i>
30 min. 11:00-11:30	10.3 E25-04 Compressor Blade Vibration Measurement Strategy Employing Strain Gauge (Telemetry) and Tip Timing for Advanced Small Frame Size Turbochargers with Vaned Diffuser Takashi Ando <i>Accelleron Switzerland Ltd. Switzerland</i>
30 min. 11:30-12:00	10.4 E25-22 High Bandwidth Telemetry System for Rotor Temperature Measurement Reducing Parasitic Noise Jan Hausknecht <i>Datatel</i>
30 min. 12:00-12:30	10.5 E25-12 Intelligent monitoring of a Recursive Sequential Combustor applied to hydrogen Fabrice Giuliani <i>Combustion Bay One e.U.</i> , Alexander Schricker, <i>Piezocryst GmbH</i> , Vojislav Petrovic, Wolfgang Waldhauser, <i>JOANNEUM RESEARCH GmbH, Austria</i>
12:30	Lunch
14:00 - 16:00	Session D - 11 Chair: Ralf Obertacke Operational experience of turbomachinery and integrated system
30 min. 14:00-14:30	11.1 ETC2025-234 Semi-supervised deep learning framework for predictive maintenance in offshore wind turbines Valerio Francesco Barnabei, Tullio Carlo Maria Ancora, Giovanni Delibra, Alessandro Corsini, Franco Rispoli <i>Sapienza University of Rome, Italy</i>

30 min. 14:30-15:00	11.2 ETC2025-141 Detection of faulty machine behavior using acoustic measurements: A predictive maintenance approach demonstrated by means of IGV misalignment Nick Linnemann, Dieter Brillert <i>University of Duisburg-Essen, Germany</i>
30 min. 15:00-15:30	11.3 ETC2025-237 Performance and Emission Analysis of Aircraft Engines under Realistic Conditions Daniel Lieder, Maximilian Bien, Erik Seume <i>Technische Universität Braunschweig, Germany</i>
30 min. 15:30-16:00	11.4 ETC2025-138 Analysis of Operation and Measurement Uncertainty of a Rebuilt 1.5 – Stage Test Turbine on the Investigation of Hot Gas Ingestion Lukas Pehle, Sophia Jörg, Stephan Stotz, <i>Institute of Power Plant Technology, Steam and Gas Turbines, RWTH Aachen University, Germany;</i> MTU Aero Engines AG
16:00 – 16:30	Coffee break
16:30 - 18:00	Session D - 12 Chair: Björn Karlsson Novel Rigs and Methods III
30 min. 16:30-17:00	12.1 E25-08 Test rig for flow validation of Industrial Gas Turbine combustors and discharge nozzles Sam Mason, Matthew Biggs, Marios Christodoulou <i>SCITEK Consultants Ltd. United Kingdom</i>
30 min 17:00-17:30	12.2 E25-05 Oil debris and condition sensors Joe Kirkup, Kam Chana <i>University of Oxford United Kingdom</i>
30 min. 17:30-18:00	12.3 E25-31 Compressortesting at DLR - an overview about testbeds and capabilities, DHL Christian Tiedemann <i>DLR, Germany</i>
30 min. 18:00-18:30	12.4 E25-40 Design of a near-infrared multi-wavelength light-field (MWLF) imager for wide temperature measurement Chunhui Yao ¹ , Hailong Liu ² , Yang Qing ² , Yumeng Zhao ¹ , Wei Zhang ¹ , Hua Fang ¹ , Gao Shan ² , Shengxian Shi ¹ ¹ School of Mechanical Engineering, Shanghai Jiao Tong University, Shanghai, China ² School of Information and Communication Engineering, Harbin Engineering University, China
18:30 - 19:30	EVI-GTI General Assembly
	Friday, 28 March 2025
8:30 - 9:30	ETC Invite Lecture #5 Titel Presenter <i>Company</i>
9:30 - 10:00	Coffee break
10:00 - 12:30	Session D - 13 Chair: Björn Karlsson Novel Rigs and Methods IV
30 min. 10:00-10:30	13.1 E25-24 Linear High Temperature Cascade for Turbine Heat Transfer Research Above 1000 K - Insights and Outlook Jan Lemmer, Peter Jeschke <i>Institute of Jet Propulsion and Turbomachinery, RWTH Aachen University</i> Michael Rabs <i>MAN Energy Solutions SE, Oberhausen, Germany</i>
30 min. 10:30-11:00	13.2 E25-35 Design and Development of Continuum Robots for Aero-Engine Inspection Tim-David Job, Martin Bensch, Thomas Seel and Moritz Schappler <i>Leibniz University Hannover, Germany</i>
30 min. 11:00-11:30	13.3 E25-37 Rotating vane-row clocking device for the application of extensive instrumentation in gas and steam turbines Eike Helmsen, Josué-Inocente Camarero Pueyo, Michael Henke <i>Leibniz University Hannover, Germany</i>
30 min. 11:30-12:00	13.4 E25-33 Extention of the Operational Range of a Compressor Testbed Driveline Rayk Schoenbeck <i>AneCom AeroTest, Germany</i>
30 min. 12:00-12:30	13.5 E25-02 Design, Performance Analysis and Validation of a New High Speed Calibration Wind Tunnel for Aerodynamic Probes Niklas Dohme, Michael Henke, Henning Rätz, Arne Vorreiter, Joerg R. Seume <i>Aerzener Maschinenfabrik GmbH, Institute of Turbomachinery and Fluid Dynamics, Leibniz University Hannover, Volkswagen AG, Germany</i>