DAY 1: JUNE 15, 2026

Time	Event	
08:00 - 08:30	**Registration and Breakfast**	
	Participant check-in and morning refreshments **Location: ETLC Solarium West**	
08:30 - 08:45	**Opening and Welcome Address**	
	Formal opening remarks and overview of the event **Location: ECERF W2-090**	
08:45 - 09:45	**Researcher Keynote I - Dr. Qiang Huang**	
	Title: Automated Geometric Qualification of 3D-Printed Products **Location: ECERF W2-090**	
09:45 - 10:00	**Coffee Break**	
	Coffee break and informal networking **Location: ECERF W2-110**	
10:00 - 11:40	**Presentation Sessions**	
	Session 1-1A: Specifications, Standards & Frameworks **Chair: Dr. Didier Talamona** *Evolution and Development of China's Geometrical Product Specification Standard System* **Changcai Cui** *A Responsibility Framework for Geometric Specification Management Through RACI Integration* **Mattia Maltauro** *Heat and Wave: Two Physical Analogies for Laplace-Beltrami Operator in Geometrical Product Specification and Verification Standards* **Nabil Anwer** **Location: ECERF W2-090**	**Session 1-1B: Tolerance Allocation & Optimization** **Chair: Dr. Rikard Söderberg** *Deviation-Increment-Based Tolerance Analysis and Sealing Prediction for PEMFC Stack Assembly under Virtual Locating* **Zhicheng Cao** *Genetic Algorithm-Based Optimization vs Decision Tree Approaches for Tolerance Allocation: Comparative Analysis on an External Gear Pump* **Jean-Yves Dantan** *Tolerance Allocation for Multiphysical System – Application to an Electric Vehicle Battery Module* **Denis Teissandier** *Gap Reduction vs. Geometric Deviation: A Trade-off in Composite Assembly* **Diogo Toyoda** **Location: ECERF W2-010**
11:40 - 12:40	**Lunch**	
	Midday meal with opportunities for informal discussion and networking **Location: ETLC Solarium West**	

DAY 1: JUNE 15, 2026 (CONT.)

<table>
<tr><th>Time</th><th colspan="2">Event</th></tr>
<tr><td rowspan="2">12:40 - 14:20</td><td colspan="2">Presentation Sessions</td></tr>
<tr><td>Session 1-2A: Tolerance Analysis & Evaluation
Chair: Dr. Sajid Ullah Butt

From Concept to Tool: Formalization and Computational Advances in Quantifier-Based Tolerance Analysis Jean-Yves Dantan

Analysis of an Overconstrained Parallel Kinematic Mechanism Considering Geometric Defects
Amina Seggaoui

Mapping Uncertainties in Tolerancing: An Industrial Design-Centric Perspective Stefan Goetz

Geometric Tolerance Analysis: A Coordinate-Free Framework for Functional Requirement Evaluation Across Arbitrary Feature Types Martin Roelfs

Location: ECERF W2-090</td><td>Session 1-2B: Compliant Parts & Simulation
Chair: Dr. Jaime Berez

Variation Simulation of Rigid Bodies with Contact Representation Kristina Wärmefjord

Machine Learning Based Surrogate Modeling of the Deformation Behavior of Large Compliant Thin-Walled Structures Guillaume Tréheux

Finite Element Modelling and Modal Analysis of the Straightening of a Series of Parts Antoine Beauquel

Towards Seamless Integration: Embedding Advanced Geometric Tolerance Models in System-Level Simulations
Christoph Steinmann

Location: ECERF W2-010</td></tr>
<tr><td>14:20 - 14:35</td><td colspan="2">Coffee Break</td></tr>
<tr><td></td><td colspan="2">Coffee break and informal networking
Location: ECERF W2-110</td></tr>
<tr><td rowspan="2">14:35 - 15:50</td><td colspan="2">Presentation Sessions</td></tr>
<tr><td>Session 1-3A: Model-Based Definition (MBD) & Digital Twin
Chair: Dr. Nabil Anwer

Model-Based Definition for Non-Rigid Variation Simulation I: Automating Tolerance Analysis with the Quality Information Framework (QIF)
Rikard Söderberg

Model-Based Definition for Non-Rigid Variation Simulation II: Feeding the Digital Twin with Data from the Quality Information Framework (QIF)
Rikard Söderberg

Operator-in-the-Loop Digital Twin Enabled Augmented Reality for Assembly Quality Assurance
Sasan Sattarpanah Karganroudi

Location: ECERF W2-090</td><td>Session 1-3B: Skin Model Shapes
Chair: Dr. Wilma Polini

Elastic Contact Deformation in Tolerance Analysis Based on Skin Model Shapes Arian Ayati

Autonomous Design of Uncertainty-Aware Gripper Finger Using Skin Model Shapes Dominik Koch

A Study on the Generation of Skin Model Shapes Considering Population Characteristics of Flatness
Akimasa Otsuka

Location: ECERF W2-010</td></tr>
<tr><td>15:50 - 16:00</td><td colspan="2">Break</td></tr>
<tr><td rowspan="2">16:00 - 18:00</td><td colspan="2">ADaMS Lab Tour</td></tr>
<tr><td colspan="2">Guided visit to the ADaMS Lab facilities, highlighting ongoing research activities and available equipment
Location: Assemble in ECERF W2-090</td></tr>
</table>

DAY 2: JUNE 16, 2026

<table>
<tr><th>Time</th><th colspan="2">Event</th></tr>
<tr><td rowspan="2">08:00 - 08:30</td><td colspan="2">Late Registration and Breakfast</td></tr>
<tr><td colspan="2">Participant check-in and morning refreshments
Location: ETLC Solarium West</td></tr>
<tr><td rowspan="2">08:30 - 09:30</td><td colspan="2">Researcher Keynote II - Dr. Habil Lazhar Homri & Dr. Stefan Goetz</td></tr>
<tr><td colspan="2">Title: Tolerancing in the Context of Industry 5.0: Comprehensive Overview and New Challenges
Location: ECERF W2-090</td></tr>
<tr><td>09:30 - 09:40</td><td colspan="2">Break</td></tr>
<tr><td rowspan="2">09:40 - 11:20</td><td colspan="2">Presentation Sessions</td></tr>
<tr><td>Session 2-1A: Knowledge Graphs & Semantics
Chair: Dr. Habil Lazhar Homri

Investigating the Potential of Ontologies to Enable Knowledge-Based Tolerancing for CNC-Milled Parts Timo Ackermann

Automated Text-to-SWRL Rule Generation for Tolerance Specification Knowledge Graphs with LLM and RAG Zhaozhe Huang

Neuro-Symbolic Graph Learning for Probabilistic Tolerance Modeling in Mechanical Assemblies Benjun Guo

Specifications-as-Code: A System for Creation of Product Characteristics from Digital Specifications Daniel Campbell & Kevin Braun

Location: ECERF W2-090</td><td>Session 2-1B: Coordinate Metrology & Point Clouds
Chair: Dr. Martin Roelfs

Minimum-Zone Cylindricity Evaluation via Differentiable Homotopy Optimization Bailin Xu

Two-Point Size Operations Simulating Calipers or Micrometers Obtained from Point Cloud Data without Interpolation Shinya Suzuki

PGAD: Progressive Geometry-Aware Denoising for Point Cloud Quality Inspection in Manufacturing Weiye Wang

Comparison of Computational Methods for Establishing Datum Reference Frames Jaime Berez

Location: ECERF W2-010</td></tr>
<tr><td rowspan="2">11:20 - 11:30</td><td colspan="2">Coffee Break</td></tr>
<tr><td colspan="2">Coffee break and informal networking
Location: ECERF W2-110</td></tr>
</table>

DAY 2: JUNE 16, 2026 (CONT.)

<table>
<tr><th>Time</th><th colspan="2">Event</th></tr>
<tr><td rowspan="2">11:30 - 12:45</td><td colspan="2">Presentation Sessions</td></tr>
<tr><td>Session 2-2A: Assembly Sequencing & Measurement Assistance
Chair: Dr. Jean Yves Dantan

Assembly Sequencing using Sparse Batch Variation Data: A Process-Oriented Tolerancing Approach
Stephan Freitag

Advancements in Measurement Assisted Assembly Using iGPS: From Robotic Assembly to Augmented Reality Guidance William Babin

Propagation of iGPS Measurement Uncertainty to GD&T Feature-Level Tolerances in Jigless Assembly
Sasan Sattarpanah Karganroudi

Location: ECERF W2-090</td><td>Session 2-2B : Advanced Manufacturing & Process Control
Chair: Dr. Ahmed Qureshi

Dimensional Accuracy of Parts Printed by Masked Stereolithography – A Comparative Study of 22 Resins
Wilma Polini

Experimental Investigation and Optimization of Grinding Parameters for Enhanced Surface Finish and Material Removal Accuracy Anahita Meraji

Using 3D Scanning for Closed-Loop Reconfiguration of Multi-Point Tools in Stretch Forming Chanmi Moon

Location: ECERF W2-010</td></tr>
<tr><td>12:45 - 13:30</td><td colspan="2">Lunch</td></tr>
<tr><td></td><td colspan="2">Midday meal with opportunities for informal discussion and networking
Location: ETLC Solarium West</td></tr>
<tr><td rowspan="2">13:30 - 15:10</td><td colspan="2">Presentation Sessions</td></tr>
<tr><td>Session 2-3A: AI & Machine Learning in Tolerancing
Chair: Dr. Javad Bolboli

Research on Component Reuse Method in Case-Based Reasoning Based on Multi-Dimensional Feature Fusion Jin Jin

Leveraging Physics-Informed Neural Networks for Efficient Tolerance Analysis Jan Kopatsch

From Monitoring to Conformity Assessment: A Two-Stage Human Centered AI Approach – Application to a High-Speed Rolling Process Noé Farrugia

Location: ECERF W2-090</td><td>Session 2-3B: Metrology: Optical, CT & Surface Inspection
Chair: Dr. Sasan Sattarpanah Karganroudi

Comparative Evaluation of Surface Determination Techniques for Dimensional Metrology under Few-View X-ray Computed Tomography Federico Pirillo

Fast Industrial Computed Tomography for Remanufacturing: Evaluating Measurement Time Savings with 3D UNETR Sparse-View Segmentation Edwin Blum

Segmentation Framework with Uncertainty Evaluation for Optical Dimensional Metrology Ladji Idrissa Fofana

Robust Coding Strategy for High-Density Measurements with a Traceable Structured Light System Louis-Ferdinand Lafon

Location: ECERF W2-010</td></tr>
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DAY 2: JUNE 16, 2026 (CONT.)

Time	Event
15:10 - 15:20	**Coffee Break**
	Coffee break and informal networking **Location: ECERF W2-110**
15:20 - 16:20	**nanoFAB Lab Tour**
	Guided visit to the University of Alberta nanoFAB facility **Location: Assemble in ECERF W2-090**
16:20 - 17:00	**Assembly for Departure Transportation**
	Participants assemble for organized transportation to the Art Gallery of Alberta **Location: Assemble in ECERF W2-090**
17:00 - 17:30	**Transportation from the University of Alberta to the Art Gallery of Alberta**
	Yellow bus experience providing organized transportation **Departure Time: 17:00**
17:30 - 17:45	**Evening Welcome Address**
	Opening remarks to welcome guests and introduce the evening program
17:45 - 18:00	**Official Conference Group Photograph**
	Group photograph with conference participants and guests
18:00 - 19:30	**Conference Gala Dinner**
	Formal dinner service accompanied by networking and conversation
19:30 - 21:00	**Art Gallery of Alberta Exhibition Viewing**
	Opportunity for guests to explore the Art Gallery of Alberta exhibits before the conclusion of the evening program
21:00 - 21:15	**Assembly for Return Transportation**
	Participants assemble for return transportation to the University of Alberta
21:15 - 21:45	**Transportation from the Art Gallery of Alberta to the University of Alberta**
	Yellow bus experience providing organized transportation **Departure Time: 21:15**

DAY 3: JUNE 17, 2026

Time	Event		
08:30 - 09:00	**Breakfast**		
	Morning refreshments **Location: ETLC Solarium West**		
09:00 - 10:15	**Presentation Sessions**		
	Session 3-1A: Quality Assurance & Performance Prediction **Chair: Dr. Stefan Goetz** *Predicting Sheet-Metal Part Form Deviation Using Discrete Inspection Points* **David Renborg** *Conformal Prediction for Multivariate Quality Assurance - Application on Coordinate Measuring Machines* **Amine Heddoub** **Location: ECERF W2-090**	**Session 3-1B: Residual Stress & Process-Induced Deformation** **Chair: Dr. Mattia Maltauro** *Assembly Deviation Simulation of Casted Part Assemblies With the Inclusion of Residual Stress* **Marx Raghu Raja Dharmaraj** *Simulating the Effects of Machining Induced Residual Stress on Geometric Variation* **Adam Lindkvist** *Experimental and Industrial Insights into Distortion Control for Megacasting* **Kristina Wärmefjord** **Location: ECERF W2-010**	**Session 3-1C: Deep Learning & Defect Detection** **Chair: Dr. Qiang Huang** *CBAM-ConvNeXt-UAD: A Knowledge Distillation and Gradient-Aware Approach for Unsupervised Industrial Defect Detection* **Chaolong Zhang** *Intelligent Recognition of Geometrical Tolerancing from Engineering Drawings toward LLM-Driven Semantic Understanding* **Nan Shao** *Vision-Based Undercut Welding Defect Detection and Quantification in a Structured Light System* **Joe David** **Location: ETLC Solarium East**
10:15 - 10:45	**Coffee Break**		
	Coffee break and informal networking **Location: ECERF W2-110**		
10:45 - 11:15	**Award Ceremony**		
	Presentation of awards and closing recognition of participants **Location: ECERF W2-090**		
11:15 - 11:45	**Break**		

DAY 3: JUNE 17, 2026 (CONT.)

Time	Event
11:45 - 12:00	**Assembly for Departure Transportation**
	Participants assemble for transportation to the Fort Edmonton Park **Location: Assemble in ECERF W2-090**
12:00 - 12:30	**Transportation from the University of Alberta to the Fort Edmonton Park**
	Yellow bus experience providing organized transportation **Departure Time: 12:00**
12:30 - 14:30	**Indigenous Peoples Experience at the Fort Edmonton Park**
	Guided Indigenous Peoples Experience at the Fort Edmonton Park
14:30 - 14:45	**Assembly for Return Transportation**
	Participants assemble for return transportation to the University of Alberta
14:45 - 15:15	**Transportation from the Fort Edmonton Park to the University of Alberta**
	Yellow bus experience providing organized transportation **Departure Time: 14:45**

Note: Agenda is subject to changes