Gut zu wissen / Good to know

Tagungsort und Partner / Venue and partners

37. Forum Bauinformatik
Universität Rostock / University of Rostock

Tagungsort / Venue

Universität Rostock / University of Rostock
Universitätsplatz 1 · 18055 Rostock
Hauptgebäude, 2. OG / Main building, 2nd floor

Aula / Main hall 212
Hauptvorträge und zugeordnete Sessions
Keynotes and assigned sessions

Hörsaal / Lecture hall 218
Weitere parallele Sessions
Further parallel sessions

Konzilzimmer / Council room 213
Arbeitskreis Bauinformatik
Working group meeting

Foyer, 2. OG / Foyer, 2nd floor
Registrierung und Kaffeepausen
Registration and coffee breaks

Partner und Unterstützer
Partners and supporters

Programmstand / Programme as of 18.09.2026
Änderungen vorbehalten / Subject to change

Freitag / Friday

02.10.2026

Hauptvortrag / Keynote · Session 6
Abschluss / Closing

09:00–09:30 Ankunft und Registrierung / Arrival and registration
Hauptgebäude, 2. OG / Main building, 2nd floor

09:30–10:30 Hauptvortrag / Keynote III · Dr. John Cohn
Aula / Main hall 212

Freude und Leidenschaft bei der Arbeit aus Ingenieurssicht
An Engineer's Perspective on Fun and Passion at Work

John Cohn gibt Einblicke in mehr als 45 Jahre als Ingenieur und zeigt, wie Neugier, Spiel und Begeisterung die eigene Arbeit bereichern können.

Drawing on more than 45 years as an engineer, John Cohn explores how curiosity, play and passion can enrich our working lives.

10:30–11:00 Kaffeepause / Coffee break

SESSION 6 / 11:00–12:15

Datenbasierte Methoden für nachhaltigen Gebäudeentwurf
Data-Driven Methods for Sustainable Building Design
Aula / Main hall 212 · Leitung / Chair: Dennis Grauer

11:00 - 11:15 Sustainability Criteria for Digital Architectural Competitions in Early Design Phases
Felix Rosenthal, Daniel Gerdes, Johannes Reinders, Nina Krautgartner

11:15 - 11:30 Harmonizing and Querying Fragmented Environmental Data Repositories for Early-Phase Building Design
Georgi Tsakov

11:30 - 11:45 Interoperable Enrichment and Querying of Circularity Information in IFC Models Using PSets, bSDD, and Ontologies
Nida Grießmann, Lukas Guntermmann, Nina Krautgartner

11:45 - 12:00 Process-Aware Surrogate Modelling for Linear Construction Logistics
Anna-Maria Mehringer, Simon K. Hoeng, Jonas Wiederer

12:15–12:45 Abschluss und Preis für den besten Beitrag / Closing and Best Paper Award
Aula / Main hall 212 · Konferenzrückblick, Preisverleihung und Musik / Conference review, award ceremony and music

Donnerstag / Thursday

01.10.2026

Nachmittag / Afternoon · Parallele / Parallel sessions 5A + 5B

SESSION 5A / 15:00–16:00

Digitale Inspektion, Visualisierung und räumliche Analyse
Digital Inspection, Visualization & Spatial Analysis
Aula / Main hall 212 · Leitung / Chair: Markus Berger

15:00 - 15:15 Evaluation of Human-Centric AI and Mixed Reality Assistance in Manual Construction Trades
Simon Konrad Hoeng, Christoph Julian Holzfurtner, Anne-Sophie Saffert, Lukas Esper

15:15 - 15:30 A Multi-Scale Digital Framework for Housing Evaluation Using GIS, IFC and AI-Assisted Spatial Analysis
Shihui Li, Elisabeth Beusker

15:30 - 15:45 From Performance Inference to Material Exploration with Routine Cement Quality-Control Data
Marchellino Ghorayeb

15:45 - 16:00 Immersive Structural Diagnostics: A Collaborative VR and Web-Based Learning Environment
Adam Globisch, Fabian Habedank, Daniel Napps

SESSION 5B / 15:00–16:00

BIM-Automatisierung, semantische Daten und digitales Bauen
BIM Automation, Semantic Data & Digital Construction
Hörsaal / Lecture hall 218 · Leitung / Chair: Nils Sören Krause

15:00 - 15:15 A Standards-Based Framework for Automated IFC Model Assessment for large datasets in research and teaching
Tamira Wrabel, Nepomuk Wolf

15:15 - 15:30 Constraint-Driven Transferability of BIM Automation Algorithms: A Methodological Study for Grey Water Recycling Network Design
Tamanna Nabila Islam

15:30 - 15:45 Fire-Safety Inference During Modeling: A Topology-Driven Legally Traceable Approach
Max Hammer, Antonio Carlone

15:45 - 16:00 A Data Space-Oriented Architecture for Craft-Oriented Construction
Essam Fadel

16:00–18:30 Freie Zeit und Austausch / Free time and networking
Am Tagungsort / At the conference venue

18:30–23:59 Konferenzabendessen / Conference dinner
Ratskeller · Neuer Markt 1 · 18055 Rostock

Lehrstuhl für Künstliche Intelligenz für nachhaltiges Bauen
Chair of Artificial Intelligence for Sustainable Construction

37. Forum Bauinformatik

37th Forum Bauinformatik

30. September – 02. Oktober 2026
30 September – 2 October 2026

Universität Rostock / University of Rostock

Programm – Program

Universitätsplatz 1 · 18055 Rostock
Hauptgebäude · 2. Obergeschoss
Main building · 2nd floor

Mittwoch / Wednesday

30.09.2026

Auftakt / Opening · Parallele / Parallel sessions 1A + 1B

12:00–13:00 Ankunft und Registrierung / Arrival and registration
Hauptgebäude, 2. OG · Essen und Getränke / Main building, 2nd floor · Food and drinks

13:00–13:30 Eröffnung / Opening
Aula / Main hall 212 · Begrüßung, Grußwort und Gruppenfoto / Welcome, greetings and group photo

13:30–14:00 Hauptvortrag / Keynote I · Professor Robert Amor
Aula / Main hall 212

14:00–14:30 Kaffeepause / Coffee break
Foyer, 2. OG / Foyer, 2nd floor

SESSION 1A / 14:30–15:30
Menschenzentrierte digitale Umgebungen
Human-Centric Digital Environments
Aula / Main hall 212 · Leitung / Chair: Nils Sören Krause

14:30 - 14:45 Toward Human-Centric Adaptive Recovery Support in Digital Industrial Work: An Exploratory Cross-Case Synthesis of Breakdown Situations
Quang Thanh Ngo, Arina Rahma

14:45 - 15:00 Navigation Graph Construction for Realistic Human Pathing
Lenz-Oliver Albrecht, Antonio Carlone

15:00 - 15:15 A Multimodal Vision Language Pipeline for Semantic Understanding of Construction Plans in Infrastructure Engineering
Marcel Aubart

15:15 - 15:30 A climate-informed digital twin framework for personal thermal comfort monitoring
Carlos Chillón Geck

SESSION 1B / 14:30–15:30
Baurobotik und digitale Fertigung
Construction Robotics & Digital Fabrication
Hörsaal / Lecture hall 218 · Leitung / Chair: Miguel Guzman-Merino

14:30 - 14:45 Integrierte mobile Roboterplattform zur autonomen Baustellendokumentation: Navigation, Manipulation und Computer Vision
Mukta Nisal

14:45 - 15:00 Computer-vision-based in-situ quantification of print metrics for 3D clay extrusion
Bastian Große, Jasper Vollmert

15:00 - 15:15 A Zone-Based Spatial Graph Representation for Strategic Robot Construction Site Planning
Ankita Maurya, Rami Mohamed Ali

15:15 - 15:30 Automated Task Planning for Construction Robotic Fabrication using Symbolic AI
Shermin Sherkat

Mittwoch / Wednesday

30.09.2026

Parallele / Parallel sessions 2A + 2B
Abendprogramm / Evening programme

15:30–16:00 Kaffeepause und Sponsoreneinblicke / Coffee break and Sponsor Insights
Foyer, 2. OG / Foyer, 2nd floor

SESSION 2A / 16:00–17:00
OpenBIM, IFC und semantische Interoperabilität
OpenBIM, IFC & Semantic Interoperability
Hörsaal / Lecture hall 218 · Leitung / Chair: Toni Nabrotzky

16:00 - 16:15 A Pre-Export Validation Framework for IFC-based Semantic Interoperability in BIM Authoring Environment
Karim Guirguis, Rameez Malik, Merna Emara

16:15 - 16:30 Syntax-Aware Tooling for IFC: AST Parsing and a Language Server Implementation
Nepomuk Wolf, Benedict Harder

16:30 - 16:45 Semantic IFC Validation Using IDS in the Opensource BIMserver
Sebastian Schilling, Zaqi Fathis, Christoph Frey

16:45 - 17:00 Natürlichsprachliche Erschließung von BIM-Modellen mit LLM und MCP-IFC-Services
Mireé Al-Sattah

SESSION 2B / 16:00–17:00
Basismodelle, Agenten und KI-gestütztes Ingenieurwesen
Foundation Models, Agents & AI-Assisted Engineering
Aula / Main hall 212 · Leitung / Chair: Clemens Kujat

16:00 - 16:15 LLM-Supported Bridge Planning: Retrieval-Augmented Generation for Integrating German Structural Codes
Diana Oberschmid, Friedrich Eder, Nastaran Morazhde Farid, Jonas Wiederer

16:15 - 16:30 CityDPC-MCP: Enabling 3D city model processing via Model Context Protocol
Tammo Hamer, Maxim Shamovich

16:30 - 16:45 Anonymaeuse.de: A Multi-Agent Orchestration Framework for Research Dialogue Generation and Agent-Behaviour Analysis
Jens Wala

16:45 - 17:00 Better Call PAUL: Planning Augmentation by User-in-the-Loop for Iterative BIM Design
Stefan Telgmann

17:00–18:00 Freie Zeit und Austausch / Free time and networking

18:00–18:30 Weg zum Schiff / Walk to the boat
Etwa 30 Minuten zum Stadthafen. / About 30 minutes to the city harbour.

18:30–22:00 Schifffahrt / Boat trip
Einstieg / Boarding 18:30 · Abfahrt spätestens / Departure no later than 19:00 · Nach / To Warnemünde · Landgang / Shore leave 20:30–21:00 · Zurück im Rostocker Stadthafen / Back at Rostock City Harbour 22:00.

Donnerstag / Thursday

01.10.2026

Vormittag / Morning · Parallele / Parallel sessions 3A + 3B

09:00–09:30 Ankunft und Registrierung / Arrival and registration

09:30–10:00 Hauptvortrag / Keynote II · Fearghal O'Donncha
Aula / Main hall 212

10:00–10:30 Kaffeepause / Coffee break

SESSION 3A / 10:30–12:00
Intelligente Energiesysteme, digitale Zwillinge und Umweltsysteme
Smart Energy Systems, Digital Twins & Environmental Systems
Aula / Main hall 212 · Leitung / Chair: Dennis Grauer

10:30 - 10:45 Towards flexible building energy surrogate models: a novel feature representation method
Luisa Claus, Simon Joller, Xiliu Yang, Max Zorn

10:45 - 11:00 Weather-contextualized multivariate clustering of electrical power consumption profiles of a single family home
Arthur Schmidt, Oliver Abele

11:00 - 11:15 Comparative Evaluation of Graph Attention Networks and Physics-Informed Multi-Layer Perceptrons for Urban Pluvial Flood Surrogate Modelling: A Benchmark Study
Farid Arabameri

11:15 - 11:30 A Scalable and Modular Open-Source Framework for Urban Digital Twins
Jakob Tanz

11:30 - 11:45 A Digital Twin framework for environmental cascading events in coastal environments
Pieris Panagi

11:45 - 12:00 Embodied Navigation: Investigation on Audio-Visual-Spatial Cognition and Workload Taxonomy in Technology-Mediated Space
Arina Rahma, Quang Thanh Ngo, Begum Aktas

SESSION 3B / 10:30–12:00
Tragwerksplanung und Bauwerksüberwachung
Structural Engineering & Structural Health Monitoring
Hörsaal / Lecture hall 218 · Leitung / Chair: Alhussain Yousef

10:30 - 10:45 From FEM Modelling to Quantum Approximate Optimization Algorithm-Based Sensor Placement in Warren Trusses
Matteo Hirschmann

10:45 - 11:00 Neural network–driven identification of normal forces in space truss structures from experimental dynamic data
Mena Micheal Zaki Abdelnour

11:00 - 11:15 Prediction of durability ratings based on damage data from highway bridges in Germany
Justus Weyers, Lisa von Rössing, Patrick Herbers

11:15 - 11:30 Machine-Learning-basierte Auswertung von Querkraftversuchen an Spannbetonträgern – Untersuchung zu Dateneffizienz und Transfer Learning
Kenan Manjouneh, Thomas Braml

11:30 - 11:45 An Ontology-Driven Framework for Semantic Bridge Inspection: Linking Drone Data to IFC 4.3 Elements through a Damage Knowledge Graph
Debarka Brahma, Mukta Nisal

11:45 - 12:00 Optimizing and predicting process parameters for clay additive manufacturing using design of experiments
Jasper Vollmert, Bastian Große

Donnerstag / Thursday

01.10.2026

Mittag / Midday · Parallele / Parallel sessions 4A + 4B

12:00–13:00 Mittagspause / Lunch break

SESSION 4A / 13:00–14:30
Sprachmodelle, Wissen und automatisierte Regelprüfung
LLMs, Knowledge & Automated Compliance
Aula / Main hall 212 · Leitung / Chair: Clemens Kujat

13:00 - 13:15 Prompt-Based Semantic Structuring of Bills of Quantities Using Large Language Models
Jonath Nivethan Skandasivam, Sven Zentgraf, Katharina Sigalov

13:15 - 13:30 Building a shared understanding - How LLMs can be integrated to help understand and ensure IDS compliance
Florian Becker, Robin Ov, Ayman Soultana, Daniel Napps

13:30 - 13:45 Klassifikationsschema zur Bewertung der Formalisierbarkeit von bautechnischen Regelwerken
Jan Hildebrand, Marian Kurzawa

13:45 - 14:00 chema-Constrained Rule Synthesis: Evaluating LLMs for Graph Rewriting in Model Generation
Benedict Harder, Maikel J.S. Brinkhoff

14:00 - 14:15 BIM-basierte Qualitäts- und Abrechnungskontrolen im Straßenbau mittels UAV
Martin Jennerjahn, Nils Sören Krause

SESSION 4B / 13:00–14:30
KI-gestützter Entwurf und multimodale Gebäudeanalyse
AI-Assisted Design & Multimodal Building Analysis
Hörsaal / Lecture hall 218 · Leitung / Chair: Nils Sören Krause

13:00 - 13:15 From Parametric Models to Inverse Design: Synthetic BIM Data Generation for AI-Assisted Bridge Engineering
Jonas Wiederer

13:15 - 13:30 Localized Multimodal Reasoning for Semantic Analysis of Architectural Floor Plans
Daniel Schulz

13:30 - 13:45 Automated floor plan evaluation for building permits
Jannes Dorn, Orhun Özcan

13:45 - 14:00 Entwicklung eines KI-gestützten Workflows zur Erstellung generativer Raumaufteilungen aus 2D-Gebäudeumrissen
Niklas Lückenotte, Daniel Napps

14:00 - 14:15 Agile Prozesse durch modellbasierte Baustellendigitalisierung in der Infrastruktur
Martin Wogan

14:00–18:00 Arbeitskreis Bauinformatik / Working group meeting
Konzilzimmer / Council room 213 · Für Professorinnen, Professoren und Arbeitskreismitglieder / For professors and working group members

14:30–15:00 Kaffeepause / Coffee break
Foyer, 2. OG / Foyer, 2nd floor