Joint Proceedings of the

STAF 2026 Workshops

AgileMDE, GCM, ICMM, LLM4SE, TTC

June 29–July 3, 2026
Rennes, France

CEUR-WS.org/Vol-4338/preface.pdf

Edited by:
Djamel Eddine Khelladi, Stéphanie Challita, Nan Messe, Sobhan Yassipour Tehrani, Shirin Hussein, Shekoufeh Rahimi, Nicolas Behr, Stefania Dumbrava, Colin Atkinson, Minakshi Kaushik, Arne Lange, Thomas Weber, Boqi Chen, Antonio Cicchetti, Robert Clarisó, Riccardo Rubei, Sandra Greiner, Georg Hinkel, Théo Le Calvar

CEUR Workshop Proceedings ceur-ws.org ISSN 1613-0073
published 2026-11-26

Preface

The symposium on Software Technologies: Applications and Foundations (STAF 2026) was held from 10 June to 3 July 2025, in Rennes, France. Its workshops, as usual, were an essential complement to the programme of the main conferences of the event. These proceedings bring together the collective insights and contributions from five workshops held during STAF 2026:

- AgileMDE 2026 - Agile Model-Driven Engineering
- GCM 2026 - Graph Computation Models
- ICMM 2026 - (In-)Consistency Management in Modeling
- LLM4SE 2026 - Large Language Models For Generative Software Engineering
- TTC 2026 - Transformation Tool Contest

We would like to thank all community members, authors, keynote speakers, program committee members, and organizers who have contributed to making STAF 2026 workshops a success.

Djamel Eddine Khelladi (General Chair)
Stéphanie Challita (Workshop Chair)
Nan Messe (Workshops Proceeding Chair)

AgileMDE 2026

The fourth International Workshop on Agile Model-Driven Engineering (AgileMDE 2026) is held as part of STAF 2026 (Software Technologies: Applications and Foundations), taking place from June 29 to July 3, 2026, at the INRIA Center, University of Rennes. AgileMDE continues to serve as a dynamic platform for presenting and discussing the latest developments at the intersection of agile methods and model-driven engineering (MDE), bringing together academic researchers and industry practitioners.

The workshop aims to: Facilitate the exchange of insights between practitioners and researchers on the challenges and solutions in agile MDE. Identify effective strategies and key success factors in applying agile MDE. Foster collaboration and strengthen the community of agile MDE researchers and practitioners.

The emergence of Agile methods and Model-driven Engineering (MDE) in the late 1990s and early 2000s offered contrasting yet innovative solutions to address the high failure rates observed in conventional software development processes. Initially, MDE processes, like the Rational Unified Process (RUP), appeared cumbersome and aligned with traditional staged development approaches, seemingly more suited to systems with static requirements.

However, as businesses encountered environments characterised by rapid requirement changes and system evolution, the demand for agile MDE grew. Significant progress has since been made in applying agile MDE practices across various sectors such as telecoms, automotive, railway, and avionics.

Research efforts have also advanced in integrating agile methods with MDE concepts, aiming to leverage the strengths of both approaches. MDE enhances Agile practices by automating processes, thus accelerating value delivery to customers, and increasing process reliability. Conversely, increased agility in MDE processes can foster user-centred approaches and flexibility.

Organizing Committee

- Sobhan Yassipour Tehrani, University College London (UCL), United Kingdom
- Shirin Hussein, University College London (UCL), United Kingdom
- Shekoufeh Rahimi, University of Roehampton, United Kingdom

Program Committee

- Imad Berrouyne, Mälardalen University, Sweden
- Artur Boronat, University of Leicester, United Kingdom
- Shabih Fatima, Middlesex University, United Kingdom
- Sorour Jahanbin, Storebrand, Norway
- Kevin Lano, King's College London, United Kindom
- Atefeh Nirumand, Luxembourg Institute of Science and Technology, Luxembourg
- Mahsa Panahandeh, University of Ottawa, Canada
- Vahid Rafe, University of London, United Kingdom
- Raman Ramsin, Sharif University of Technology, Iran
- Mohammadreza Sharbaf, University of Isfahan, Iran
- Yannis Zorgios, CLMS (UK) LIMITED, United Kingdom

GCM 2026

Graphs are ubiquitous mathematical structures with an appealing visual and intuitive nature. They offer a natural way to model systems across science, engineering, and beyond, from computer science and biology to business process modeling. Graph computation models form a class of high-level models in which graphs are first-class citizens, generalizing classical models based on strings (e.g., Chomsky grammars) or trees (e.g., term rewriting systems).

Together with their visual character, their mathematical foundation facilitates the specification, validation, and analysis of complex systems. A wide range of computation models has been developed on top of graphs and rule-based graph transformations, capturing features of programming languages and systems, software development paradigms, concurrent calculi, local computations, and distributed algorithms, as well as biological and chemical computations.

The Graph Computation Models International Workshop (GCM), now in its 17th edition, is devoted to foundational research on, and applications of, state-of-the-art graph computation models, with a particular focus on modeling and software engineering.

Organizing Committee

- Nicolas Behr, CNRS, Université Paris Cité, IRIF, France
- Stefania Dumbrava, ENSIIE & Télécom SudParis, France

Program Committee

- Nicolas Behr, CNRS, Université Paris Cité, IRIF, France
- Clara Bertolissi, INSA CVL & LIFO, France
- Andrea Corradini, University of Pisa, Italy
- Frank Drewes, Umeå universitet, Sweden
- Stefania Dumbrava, ENSIIE & Télécom SudParis, France
- Fabio Gadducci, University of Pisa, Italy
- Dominik Grzelak, Technische Universität Dresden, Germany
- Reiko Heckel, University of Leicester, United Kingdom
- Jens Kosiol, Brandenburgische Technische Universität Cottbus-Senftenberg, Germany
- Marino Miculan, University of Udine, Italy
- Mark Minas, Universität der Bundeswehr München, Germany
- Detlef Plump, University of York, United Kingdom
- Michele Sevegnani, University of Glasgow, United Kingdom
- Vadim Zaytsev, University of Twente, Netherlands

Keynote Speakers

- **Jade Alglave (Arm and University College London, United Kingdom)**, Artem Khyzha (Arm Ltd, United Kingdom), Luc Maranget (Inria, France), Nikos Nikoleris (Arm Research, United Kingdom), Hadrien Renaud (University College London, United Kingdom), Filippo Sestini (Arm, United Kingdom).
  Purr-spectives on graphs.
- **Nicolas Keriven (CNRS, France).**
  Generalization of Graph Neural Networks on latent random graphs.

ICMM 2026

This year, we started with a specific challenge on the management of inconsistencies to bring together academia and industry, especially tool vendors but also industry practitioners experiencing the issues brought up in the challenge in their day-to-day work. With the abstract description of the challenge we invite all perspectives on the management of inconsistencies, be it from an existing tool, already able to solve (parts of) the described issues, up to practitioners who can express their requirements and proposals for a solution to the challenge.

This workshop seeks to explore novel ways of addressing consistency issues, including their implications for enhancing software quality, from all fields engaged in constructive modeling. This year's edition introduces a new challenge aimed at advancing tool support for identifying consistencies and inconsistencies in multi-model systems. It brings forward several open questions in the interplay between modeling and consistency, addressing key topics such as:

- Consistency checking, repair, and preservation within modeling processes.
- Techniques for handling existing inconsistencies in large-scale or distributed models.
- Challenges and solutions for multi-view and multi-paradigm modeling, including the View-Update Problem.
- Approaches to improving the utility of abstractions for diverse stakeholders while maintaining consistency.
- Novel methods to assure software quality through effective consistency management.

Organizing Committee

- Arne Lange, Karlsruhe Institute of Technology, Germany
- Thomas Weber, Karlsruhe Institute of Technology, Germany
- Colin Atkinson, University of Mannheim, Germany
- Minakshi Kaushik, Karlsruhe Institute of Technology, Germany

Program Committee

- Moussa Amrani, University of Namur, Belgium
- Dominique Blouin, Telecom Paris, Institute Polytechnique de Paris, France
- Antonio Cicchetti, Mälardalen University, Sweden
- Loek Cleophas, Eindhoven University of Technology (TU/e) and Stellenbosch University (SU), Netherlands
- Istvan David, McMaster University, Canada
- Juan de Lara, Autonomous University of Madrid, Spain
- Esther Guerra, Universidad Autónoma de Madrid, Spain
- Sylvain Guérin, IMT Atlantique, France
- Sebastian Götz, Technische Universität Dresden, Germany
- Robbert Jongeling, Mälardalen University, Sweden
- Gabor Karsai, Vanderbilt University, United States
- Heiko Klare, Vector Informatik GmbH, Germany
- Thomas Kuehne, Victoria University of Wellington, New Zealand

- Thomas Kühn, Martin-Luther-University Halle-Wittenberg, Germany
- Judith Michael, University of Regensburg, Germany
- Bernhard Rumpe, RWTH Aachen University, Germany
- Juha-Pekka Tolvanen, MetaCase, Finland
- Andreas Winter, University of Oldenburg, Germany

LLM4SE 2026

The introduction of ChatGPT, Google's Gemini, and Bing Chat AI marked a significant advancement in the field of natural language processing, contributing to the widespread popularity of large language models (LLMs). These models have found successful applications in diverse sectors, including healthcare, finance, education, and various engineering fields, among others. Agents powered by LLMs, such as Claude Code and GitHub Copilot, have revolutionised the landscape of software engineering. They significantly enhance developers' efficiency in several classical software engineering tasks like coding, testing, and documentation. That is, LLMs are transforming the way we interact with computers, and their application to software engineering holds immense potential.

This workshop will explore how these powerful models can be harnessed to automate, augment, and even transform the software development lifecycle, leading to increased productivity, innovative solutions, and a new era of software creation. In this scenario, the role of those who will use these powerful tools and how they will use them is of paramount importance. On the one hand, generative AI can assist in generating code; on the other hand, the conversion from natural language and the governance of these tools will be handled by software engineers through various techniques proposed by the AI community.

Hence, the primary objective of this full-day workshop is to explore potential scenarios where software engineers can adopt LLMs to perform various tasks and engage in discussions regarding the implementation of such solutions and the philosophical implications of this significant technological advancement.

Organizing Committee

- Antonio Cicchetti, Mälardalen University, Sweden
- Riccardo Rubei, Mälardalen University, Sweden
- Boqi Chen, University of Ottawa, Canada
- Robert Clarisó, Universitat Oberta de Catalunya, Spain

Program Committee

- Maryam AlShehhi, McGill University, Canada
- Aren Babikian, University of Toronto, Canada
- Luca Berardinelli, Johannes Kepler University Linz, Austria
- Giordano d'Aloisio, University of L'Aquila, Italy
- Andrea D'Angelo, University of L'Aquila, Italy
- Alfonso de la Vega, Universidad de Cantabria, Spain
- Juan de Lara, Autonomous University of Madrid, Spain
- Esther Guerra, Universidad Autónoma de Madrid, Spain
- José Antonio Hernández López, University of Murcia, Spain
- Robbert Jongeling, University of York, United Kingdom
- Zohra Kaouter Kebaili, University of Rennes, CNRS, IRISA, France
- Mootez Saad, Dalhousie University, Canada
- Vincenzo Stoico, Vrije Universiteit Amsterdam, Netherlands

Keynote Speakers

- **Dominik Bork (TU Wien, Austria)**.
  Models as Context: Making LLMs Useful, Reliable, and Accountable in Software Engineering

- **Ralf Lämmel (Universität Koblenz, Germany).**
  Ontologies as LLM-Engineered Software Engineering Artifacts: Lessons from the Foundations of Software Languages

TTC 2026

Transformations of structured data, such as relational data, abstract syntax trees and high-level graph-based models, are cross-disciplinary at the heart of a wide range of applications. The success of transformation methods heavily depends on the availability of expressive and efficient tools. A large variety of tools exist for different transformation methods. Yet, for potential users, working in application domains where transformation techniques may be useful, it is difficult to select the right tool for their purpose. The aim of this event is to evaluate and compare the expressiveness, the usability and the performance of transformation tools for structured data along a number of selected challenging case studies.

Organizing Committee

- Sandra Greiner, University of Southern Denmark, Denmark
- Georg Hinkel, RheinMain University of Applied Sciences and Arts, Germany
- Théo Le Calvar, IMT Atlantique, France

Program Committee

- Artur Boronat, University of Leicester, United Kingdom
- Thomas Buchmann, Hochschule für Angewandte Wissenschaften Hof, Germany
- Mickael Clavreul, ESEO / LERIA, University of Angers, France
- Máté Földiák, Linköping University, Sweden
- Kevin Lano, King's College London, United Kingdom
- Alex Lüpges, RWTH Aachen University, Germany
- Shekoufeh Rahimi, University of Roehampton, United Kingdom
- Matthew Coyle, IMT Atlantique, France

Steering Committee

- Hubert Garavel, INRIA, France
- Davide di Ruscio, University of L'Aquila, Italy
- Manuel Wimmer, JKU Linz, Austria
- Steffen Zschaler, King's College London, United Kingdom