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ICPM

International Conference on Process Mining
2024

IEEE
IEEE Computational Intelligence Society
DTU

Contents

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Message from the General Chair

Dear ICPM participants

Welcome to the 6th International Conference on Process Mining, and welcome to DTU!

First of all, I would like to thank the Steering Committee for giving me the opportunity to organize the most important conference on Process Mining and to welcome you all to Denmark and DTU.

Many people actively contributed to making this conference possible. I want to start by mentioning the local organization team, in particular, Andrey Rivkin, Ekkart Kindler, Ann-Cathrin Dunker, and all the volunteers. THANKS!

I am deeply grateful to the Program Committee Chairs (Xixi Lu, Luise Pufahl, Minseok Song) and all PC members for their involvement and active participation in the review process and subsequent discussions, which were crucial in selecting the best papers for presentation and defining the scientific content of the conference.

An enormous appreciation goes to the Workshops Chairs (Andrea Delgado, Tijs Slaats), Demo Chairs (Giovanni Meroni, Karolin Winter), Doctoral Consortium Chairs (Han van der Aa, Jochen De Weerdt), and Best PhD Dissertation Award Chairs (Artem Polyvyanyy, Chiara Di Francescomarino), as well as the members of the committees for the various satellite events, whose efforts helped create such a rich conference program.

A huge “thank you” is to the Industry Chairs (Jean-Marc Erieau, Julian Lebherz, Elham Ramezani) for connecting with many sponsors and for their extraordinary efforts in making ICPM an exciting event not only for academics or process mining experts but for everyone interested in learning more about process mining. Many thanks to the Nordic Industry Chairs (Thomas Troels Hildebrandt, Hugo-Andrés López-Acosta, Mark Bernhard Riis) for their help in connecting with the local businesses.

I also want to emphasize the invaluable assistance of the Publicity Chairs (Amine Abbad-Andaloussi, Iris Beerepoot), Digital Infrastructure Chairs (Giovanni Meroni, Francesca Zerbato), and Proceeding Chairs (Alyzia-Maria Konsta, Jens Kanstrup Larsen), whose efforts were crucial in attracting and handling the number of high-quality submissions.

I sincerely thank the authors of all papers for their remarkable contributions, which greatly contributed to the success of this conference.

Finally, I would like to thank DTU and DTU Compute and all the staff across all departments and offices who helped to organize ICPM successfully! Of course, this event would not have been possible without the support of all the sponsors from all tiers: the Diamond Sponsor (Celonis), the Platinum Sponsors (Software AG/Aris, Apromore, SAP Signavio, EY, Evidant, Microsoft), the Gold Sponsors (Mindzie, Process Science, Apolix, Mehrwerk), as well as the Sponsors and the Startup Sponsors: thanks for your active support to the Process Mining community!

I am sure that our passion, dedication, and collaborative spirit will make this event truly exceptional. I wish us all an inspiring and productive conference filled with insightful exchanges, new friendships, and the spark of innovative ideas. May our collective efforts lead to remarkable advancements and an even brighter future for Process Mining.

Andrea Burattin
ICPM 2024 General Chair

General Information

Our staff is always available at the registration desk. Please contact us if you have any problems.

Conference Badge

A conference badge will be provided as soon as you have registered at the registration desk. Please keep the badge visible at all times during the conference and all events.

Wireless Internet Access

DTU offers Eduroam access. If you don't have an Eduroam account, you can use the DTU guest wifi network DTU`guest`.

Important Phone Numbers

Dial **112** if you have an urgent need for police, ambulance, or fire brigade. Dial **1813**. In case of illness, the medical staff will then take a decision on the further course of treatment.

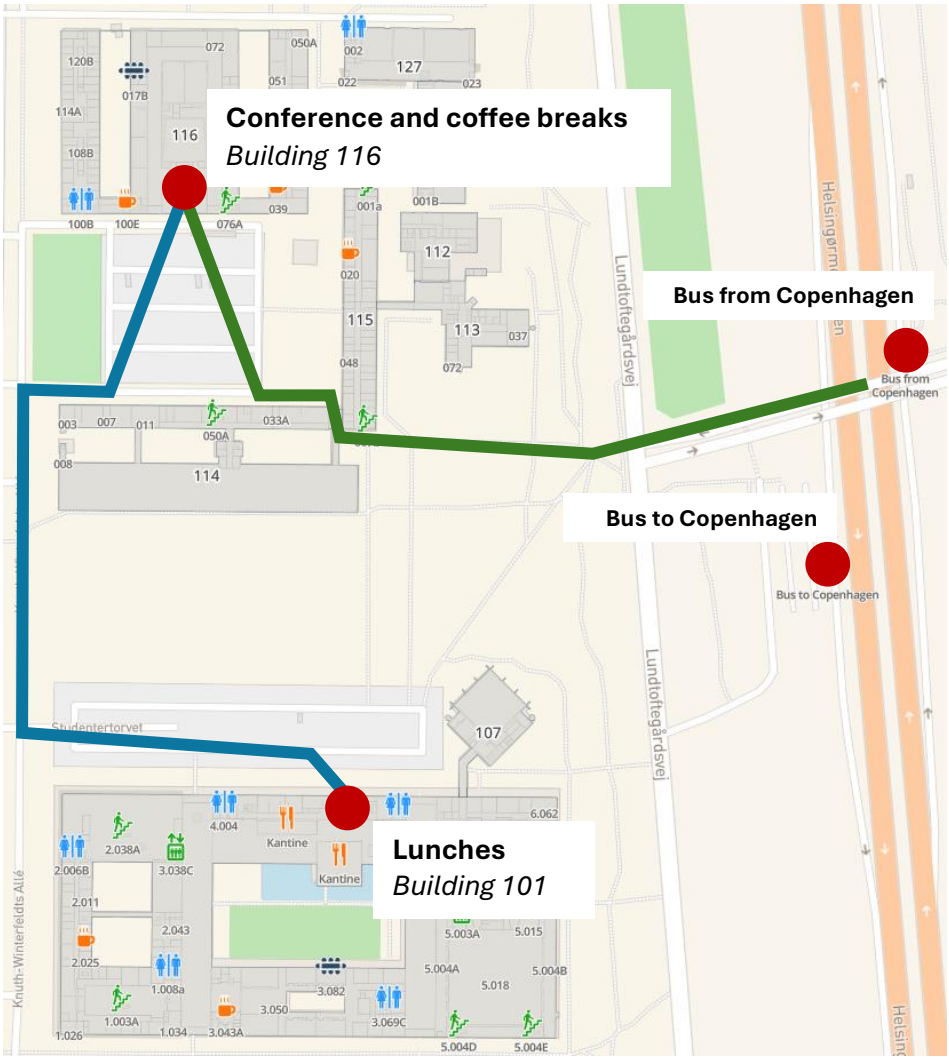
Conference application – ICPM App

In the conference application, you can see the list of participants, see the complete program, create your personalized agenda, share messages, and share pictures with the other attendees.

The application is available at https://icpm.compute.dtu.dk.

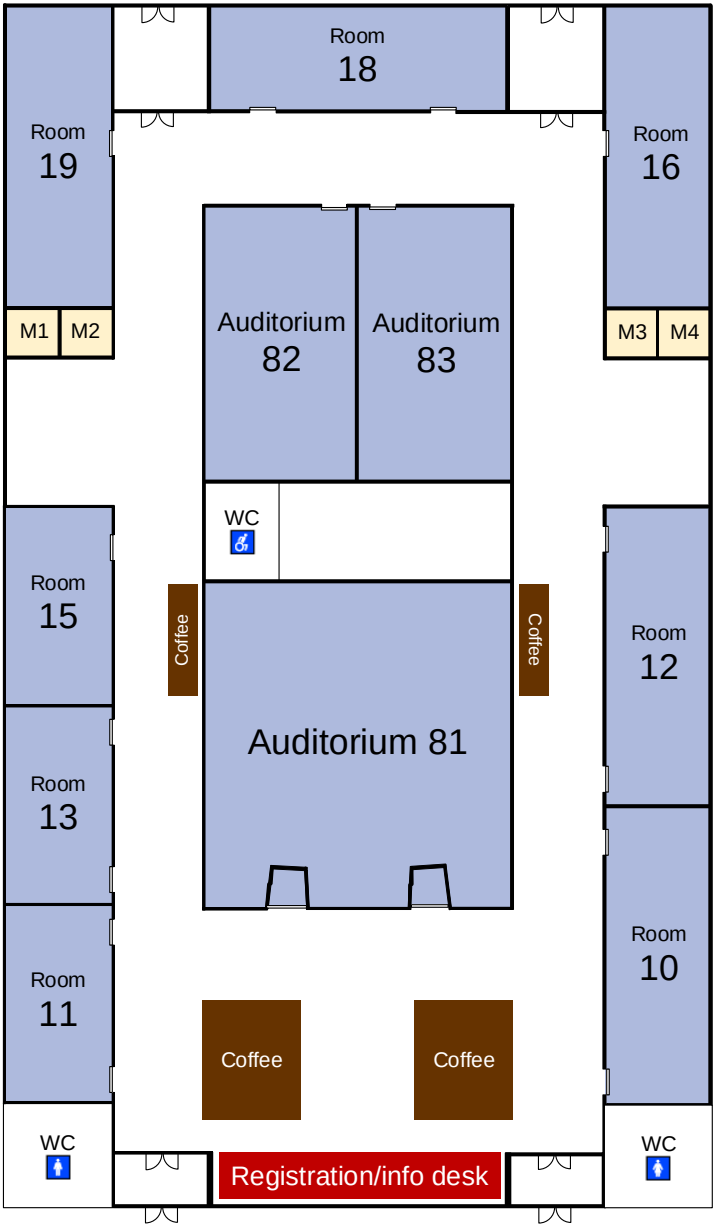
Coffee breaks and lunches

Coffee breaks are served at the conference location. Lunches will be in building 101, which is about 5 minutes walk from the conference venue.



Conference Venue

ICPM 2024 is hosted in building 116 of DTU. Here is its floor plan:



Program at Glance

Monday	Tuesday	Wednesday	Thursday	Friday
Workshops	Conference	Industry days	Conference	Industry days	Doctoral Consortium
Coffee					
Workshops	Conference	Industry days	Conference	Industry days	Doctoral Consortium
Lunch					
Workshops	Demo intro	Conference	Industry days	Conference	Industry days	Doctoral Consortium
	Conference	Demos				
Coffee			*Farewell*		*Coffee*
Workshops	Conference	Demos	Conference	Industry days		Doctoral Consortium
Reception		*Experience and Social dinner*			*PhD Party*

Keynotes

Multi-paradigm, Online, Hierarchical Simulations to Support Process Mining

Prof. Young-Jun Son

James J. Solberg Head and Ransburg Professor of Industrial Engineering. Purdue University, USA

Tuesday, October 15, at 09:30
Auditorium 81

Abstract

In this keynote talk, multi-paradigm, hierarchical, and online simulations will be introduced and discussed to support effective process mining. First, an overview of multi-paradigm simulations, such as discrete event simulation (DES), agent-based modeling, and system dynamics, will be provided. Key characteristics and differences will be explained. Second, an online simulation-based planning and control (SPC) approach is introduced, where a fast-running DES simulation is used as a predictive tool to evaluate decision alternatives at the planning stage, and the same DES model is used as a task generator to drive a real system at the control stage. Third, an extension of SPC to a highly complex system is discussed. In this talk, a few case studies will be used to illustrate the above-mentioned concepts and facilitate discussions.

Biography

Young-Jun Son is a professor at Purdue University. Prior to this position, he was the Department Head and Professor of Systems and Industrial Engineering at the University of Arizona. His research focuses on data-driven, multi-scale simulation and decision models needed for design and control in various applications, including extended manufacturing enterprises, renewable energy and storage networks, homeland security, transportation, and social networks.

Operational Excellence Beyond Processes: Expanding the Reach of Process Mining

Martin Klenk

Chief Technology Officer and
Co-Founder, Celonis

Wednesday, October 16, at 09:30
Auditorium 81

Abstract

In this keynote, we explore how process mining drives operational excellence not only in traditional processes but also in solving unconventional challenges like data lineage. By viewing non-process problems through a process lens, we unlock new opportunities for efficiency, innovation, and value creation.

Biography

Martin Klenk is Chief Technology Officer and co-founder of Celonis, a process mining and execution management decacorn with headquarters in New York and Munich. As CTO, Martin leads Celonis' development and innovation department. He is responsible for software development and the company's technological roadmap. Celonis is ranked as the number one overall process mining vendor by HFS and recognized as a market leader by Gartner, Forrester, IDC, Everest Group and NelsonHall. As one of the company's co-founders, Matin was awarded the "Deutsche Zukunftspreis" by Frank-Walter Steinmeier in 2019.

For the complete agenda of the industry days, please scan the QR code:

Detailed Program

Monday – 14 October – Workshops

In the tables below, an overview of the workshop distributions is presented:

	Aud. 81	**Aud. 82**	**Aud. 83**	**Room 10**	**Room 12**
09:00-10:30	GenAI4PM	EdbA	ML4PM	ERPM	PM4S
10:30-11:00	*Coffee*				
11:00-12:30	GenAI4PM	EdbA	ML4PM	ERPM	PM4S
12:30-13:30	*Lunch*				
13:30-15:00	GenAI4PM	EdbA	ML4PM	ERPM	COMINDS
15:00-15:30	*Coffee*				
15:30-17:00	GenAI4PM	EdbA	ML4PM		COMINDS

	Room 16	**Room 18**	**Room 19**	**Room 15**	**Room 13**
09:00-10:30	PQMI	BuzzOs	PDCW	SMA4PM	PLC
10:30-11:00	*Coffee*				
11:00-12:30	PQMI	BuzzOs	PODS4H	EduPM	PLC
12:30-13:30	*Lunch*				
13:30-15:00	PQMI	BuzzOs	PODS4H	EduPM	PLC
15:00-15:30	*Coffee*				
15:30-17:00		BuzzOs	PODS4H	EduPM	PLC

BuzzOs - What's the buzz with objects?

Organizers: Andrey Rivkin, Jan Martijn van der Werf
Location: Room 18

Time	Session
09:00-10:30	**Session 1** • Interactive panel discussions
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** • Interactive panel discussions
12:30-13:30	Lunch
13:30-15:00	**Session 3** • Interactive panel discussions
15:00-15:30	Coffee-break
15:30-17:00	**Session 4** • Interactive writing session (panelists only)
17:15	Buses departing for welcome reception

COMINDS - COllaboration MINing for Distributed Systems

Organizers: Lorenzo Rossi, Mahsa Pourbafrani, Laura González
Location: Room 12

Time	Session
13:30-15:00	**Session 1** • Keynote: Prof. Stefanie Rinderle-Ma Applications of Collaborative Process Mining: From Compliance to Change Management • Revealing One-to-Many Event Relationships in Event Knowledge Graphs. Alessio Giacché, Sara Pettinari, and Lorenzo Rossi
15:00-15:30	Coffee-break
15:30-17:00	**Session 2** • Towards Standardized Modeling of Collaboration Processes in Collaboration Process Discovery. Janik-Vasily Benzin and Stefanie Rinderle-Ma • Extended Abstract: Coordination, Cooperation, and Collaboration in Process Mining. Christoffer Rubensson, Jennifer Brettschneider, Rachmadita Andreswari, Kate Revoredo, and Jan Mendling • Extended Abstract: Discovering Cross Organisational Processes from Message Logs. Pieter Kwantes • Extended Abstract: Extending predictive process monitoring for collaborative processes. Daniel Calegari and Andrea Delgado • Closing. Mahsa Bafrani, Laura González and Lorenzo Rossi
17:15	Buses departing for welcome reception

EdbA – Event Data & Behavioral Analytics

Organizers: Benoît Depaire, Dirk Fahland, Francesco Leotta, Arik Senderovich
Location: Auditorium 82

Time	Session
09:00-10:30	**Session 1** • Locally Optimized Process Tree Discovery. Calvin Schröder, Jan Niklas van Detten and Sander J. J. Leemans • Object-Centric Local Process Models. Viki Peeva, Marvin Porsil and Wil van der Aalst • Analyzing the Evolution of Boards in Collaborative Work Management Tools. Alfonso Bravo, Cristina Cabanillas, Joaquin Peña and Manuel Resinas
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** • Toward Robotic Event Logs for Process Mining: Feature Identification and Processing. Flavio Corradini, Sara Pettinari, Barbara Re, Lorenzo Rossi and Massimiliano Sampaolo • Challenges in Data Quality Management for IoT-Enhanced Event Logs. Yannis Bertrand, Alexander Schultheis, Lukas Malburg, Joscha Grüger, Estefanía Serral and Ralph Bergmann • Case ID detection based on time series data - the mining use case. Edyta Brzychczy, Tomasz Pełech-Pilichowski and Ziemowit Dworakowski • Ranking the Top-K Realizations of Stochastically Known Event Logs. Arvid Lepsien, Marco Pegoraro, Frederik Fonger,

	Dominic Langhammer, Milda Aleknonytė-Resch and Agnes Koschmider
12:30-13:30	Lunch
13:30-15:00	**Session 3** • A Framework for Advanced Case Notions in Object-Centric Process Mining. Jan Niklas van Detten, Pol Schumacher and Sander J.J. Leemans • Framework for Extracting Real-World Object-Centric Event Logs from Game Data. Lukas Liss, Nico Elbert, Christoph Flath and Wil van der Aalst • A Classification of Data Quality Issues in Object-Centric Event Data. Maike Basmer, Martin Kabierski, Kristina Sahling, Saimir Bala, Agnieszka Patecka and Jan Mendling • Extending Process Intelligence with Quantity-related Process Mining. Nina Graves, Tobias Brockhoff, István Koren and Wil van der Aalst
15:00-15:30	Coffee-break
15:30-17:00	**Session 4** • Plenary Workshop Discussion
17:15	Buses departing for welcome reception

EduPM – Education meets Process Mining

Organizers: Jorge Munoz-Gama, Francesca Zerbato, Gert Janssenswillen, Wil van der Aalst
Location: Room 15

Time	Session
11:00-12:30	**Session 1** • Opening • Assessing the impact of exam preparation process on students' careers. Domenico Potena, Laura Genga, Lorenzo Galeazzi, Gianmarco Viganò and Claudia Diamantini • Understanding Student Behavior using Active Window Tracking and Process Mining. Mahendrawathi Er, Wouter Van Der Waal, Iris Beerepoot, Moch. Aqmal Rasyadan Reza Putra and Hardhika Propitadewa • Measuring Skill Acquisition and Retention: A Case Study of Math Fluency. Gert Janssenswillen, Seppe Van Daele and Marc Van Daele
12:30-13:30	Lunch
13:30-15:00	**Session 2** • Evaluation of Study Plans using Partial Orders. Christian Rennert, Mahsa Pourbafrani and Wil van der Aalst. • Constructive Alignment in Process Mining. Mitchel Brunings, Dirk Fahland and Boudewijn van Dongen • Show & Tell: Celonis - Making OCPM available for everyone (in academia). Angela-Sophia Gebert, Keisha Glori Natalia and Clemens Drieschner

15:00-15:30	Coffee-break
15:30-17:00	**Session 3** • Keynote: Prof. Daniel Spikol Challenges and Opportunities of Learning Analytics, with a focus on Multimodality • Closing
17:15	Buses departing for welcome reception

ERPM – Empirical Research in Process Mining

Organizers: Djordje Djurica, Kateryna Kubrak, Francesca Zerbato, Amine Abbad-Andaloussi
Location: Room 10

Time	Session
09:00-10:30	**Session 1** **Chair:** Djordje Djurica • Using Facial Expressions to Predict Process Mining Task Performance. Lital Shalev, Irit Hadar, Rotem Dror, Adir Solomon, Elizaveta Sorokina, Michal Weisman Raymond and Pnina Soffer • Using Process Mining with Pre- and Post-Intervention Analysis to Improve Digital Service Delivery: A Governmental Case Study. Jacques Trottier, William Van Woensel, Xiaoyang Wang, Kavya Mallur, Najah Mary El Gharib and Daniel Amyot • A Taxonomy for Conformance Checking Visualizations. Marie-Christin Häge and Jana-Rebecca Rehse • Leveraging Process Mining for Enhanced Efficiency in German Utilities: Insights and from a Qualitative Study (Lessons Learned). Henning Nusch, Martina Navratilova, Ralf Plattfaut, Till Haumann and André Coners
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** **Chair:** Francesca Zerbato • Towards an Ethogram of Exploratory Process Mining Behavior. Jessica Van Suetendael, Benoît Depaire, Mieke Jans and Niels Martin

	• Structuring Empirical Research on Process Mining at the Individual Level using the Theory of Effective Use. Jan Mendling, Mieke Jans and Kristina Sahling • Improving Business Processes through Hybrid Simulation Model: A Case Study. Francesca Meneghello, Massimiliano Ronzani, Massimo Coletti, Chiara Di Francescomarino, Chiara Ghidini and Debora Di Marco • An Object-Centric Data Model for Assessing Inventory Management in Retail Companies (Lessons Learned). Dina Kretzschmann, Alessandro Berti and Wil M.P. van der Aalst
12:30-13:30	Lunch
13:30-15:00	**Session 3** **Chair:** Djordje Djurica • Leveraging Process Mining on the Shop Floor: An Exploratory Study. Felix Rothhagen, Felix Kerst, Eduard Kant Mandal, Candan Cetin and Carolin Ullrich • Panel: Why go empirical? A discussion on Process Mining research and practice (Moderator: Kateryna Kubrak) Panelists: Jan Mendling (Humboldt-Universität zu Berlin), Mieke Jans (Hasselt University), Irina Tentina (Eindhoven University of Technology) and Lotte Vugs (Konekti) • Closing

GenAI4PM – Generative Artificial Intelligence for Process Mining

Organizers: Maxim Vidgof, Alessandro Berti, Mohammadreza Fani Sani
Location: Auditorium 81

Time	Session
09:00-10:30	**Session 1** • Opening • Keynote by Ashvini Sharm
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** • PM-LLM-Benchmark: Evaluating Large Language Models on Process Mining Tasks. Alessandro Berti, Humam Kourani and Wil M.P. van der Aalst • Providing domain knowledge for process mining with ReWOO-based agents. Max Vogt, Peter van der Putten and Hajo Reijers • Skill Learning Using Process Mining for Large Language Model Plan Generation. Andrei Cosmin Redis, Mohammadreza Fani Sani, Bahram Zarrin and Andrea Burattin • ProcessTBench: An LLM Plan Generation Dataset for Process Mining (short paper). Andrei Cosmin Redis, Mohammadreza Fani Sani, Bahram Zarrin and Andrea Burattin • A Conversational Framework for Object-centric Event Logs Analysis (short paper). Angelo Casciani, Mario Luca Bernardi, Marta Cimitile and Andrea Marrella
12:30-13:30	Lunch

13:30-15:00	**Session 3** • Terpsichora: a tool to generate synthetic MP-Declare process models. Wesley da Silva Santos, Juliana Rezende Coutinho, Georges Miranda Spyrides, Fernanda Araujo Baião and Hélio Côrtes Vieira Lopes • Nisaba: Generating Natural Language Description of Multi-Perspective Declarative Process Models (short paper). Wesley da Silva Santos, Juliana Rezende Coutinho, Georges Miranda Spyrides, Fernanda Araujo Baião and Hélio Côrtes Vieira Lopes • Local Large Language Models for Business Process Modeling. Kaan Apaydin and Yorck Zisgen • Process Modeler vs. Chatbot: Is Generative AI Taking Over Process Modeling? Nataliia Klievtsova, Janik Vasily Benzin, Juergen Mangler, Timotheus Kampik and Stefanie Rinderle-Ma • Large Language Models as User Interface mechanisms for declarative process modelling (short paper). Søren Debois, Morten Marquard, Panagiotis Keramidis, Thomas Hildebrandt and Vlad Alexandru Faget
15:00-15:30	Coffee-break
15:30-17:00	**Session 4** • PM4Py.LLM: a Comprehensive Module for Implementing PM on LLMs (short paper). Alessandro Berti • Hands-on session: LLM-based insights generation and code generation with pm4py. • Open discussion on Generative AI in Process Mining and beyond
17:15	Buses departing for welcome reception

ML4PM – Leveraging Machine Learning in Process Mining

Organizers: Paolo Ceravolo, Sylvio Barbon Junior, Vincenzo Pasquadibisceglie, Annalisa Appice
Location: Auditorium 83

Time	Session
09:00-10:30	**Session 1** • Opening • Invited presentation
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** • On the Impact of Low-Quality Activity Labels in Predictive Process Monitoring. Marco Comuzzi, Sungkyu Kim, Jonghyeon Ko, Cinzia Cappiello, Musa Salamov and Barbara Pernici • Predictions in Predictive Process Monitoring with Previously Unseen Categorical Values. Johannes Roider, Weixin Wang, Dario Zanca, Martin Matzner and Bjoern Eskofier • Mitigating Case-Length Distortion in Deep-Learning-Based Predictive Process Monitoring. Brecht Wuyts, Seppe Vanden Broucke and Jochen De Weerdt • Differentially Private Event Logs with Case Attributes. Hannes Ueck, Robert Andrews, Moe Thandar Wynn and Sander J.J. Leemans
12:30-13:30	Lunch

13:30-15:00	**Session 3** • Enhancing Predictive Process Monitoring using semantic information. Jiaxin Yuan, Daniela Grigori and Han van der Aa • Towards Accurate Predictions in ITSM: A Study on Transformer-Based Predictive Process Monitoring. Marc C. Hennig • Process Model Forecasting: Univariate vs Multivariate Approaches. Yongbo Yu, Jari Peeperkorn, Johannes De Smedt and Jochen De Weerdt • CC-HIT: Creating Counterfactuals from High-Impact Transitions. Zhicong Xian, Ludwig Zellner, Gabriel Marques Tavares and Thomas Seidl
15:00-15:30	Coffee-break
15:30-17:00	**Session 4** • Tutorial: Process Mining the Scikit-Learn Way: Introducing SkPM. Sylvio Barbon Junior • Conclusion
17:15	Buses departing for welcome reception

PDCW – Process Discovery Contest Workshop

Organizer: Eric Verbeek
Location: Room 19

Time	Session
09:00-10:30	**Session 1** • Welcome and Introduction. Eric Verbeek • DisCoveR. Axel Christfort, Paul Cosma, Soren Debois, Simon Hermansen, Thomas Hildebrandt, Ragnar Jónsson, Jonas Kjeldsen, Morten Marquard, Hugo Lopez and Tijs Slaats • Pyrrhus. Axel Christfort, Yibin Xu and Tijs Slaats • UiPath PIM. Dennis Brons • BonitaMiner. Ali Nour Eldin, Benjamin Dalmas and Walid Gaaloul • Wrapping up

PLC – Processes, Laws, and Compliance

Organizers: Laura Genga, Hugo A. López, Emilio Sulis
Location: Room 13

Time	Session
09:00-10:30	**Session 1** • Opening • Keynote "How Can Large Language Models Support Process Mining and Compliance Checking?" Prof. Stefanie Rinderle-Ma. Technical University of Munich • Conceptualizing business process violations. Sebastian Dunzer, Annina Liessmann, Matthias Stierle and Martin Matzner • Three Decades of Formal Methods in Business Process Compliance: A Systematic Literature Review. Hugo A. López and Thomas Hildebrandt • Q&A
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** • End-to-end, no-code business process compliance framework for the banking industry. Nigel Adams, Michael Davern and Marcello La Rosa • Proposal for an in-house legal process mining case. Steven Knoblich, Jan Mendling and Larissa Sonja Böhme • Standardization and harmonization of law through automated process analysis and similarity techniques. Davide Audrito, Luigi Di Caro, Laura Genga, Rachele Mignone, Roberto Nai, Ivan Spada, Emilio Sulis and Vittoria Margherita Sofia Trifiletti

	• Towards visualizing and analysing legal proceedings with process mining. Vittoria Caponecchia, Bernardo D'Agostino, Giovanni Comandé, Daniele Licari and Andrea Vandin • Q&A • What's the AIM? A Methodology for Artificial Intelligence Compliance. Ilaria Angela Amantea, Guido Governatori, Marianna Molinari, Marinella Quaranta and Immaculate Motsi-Omoijiade • Challenges in Digital Compliance: Risk Assessment and Fundamental Rights under the GDPR and the EU AI Act. Olga Kokoulina • The logic of compliance in the creation of datasets for medical AI systems. Natalia Avlona • Q&A
12:30-13:30	Lunch
13:30-15:00	**Session 3** • Workshop part I Interdisciplinary Challenges on Processes, Law, and Compliance
15:00-15:30	Coffee-break
15:30-17:00	**Session 4** • Workshop part II Opportunities and future ideation
17:15	Buses departing for welcome reception

PM4S – Process Mining for Sustainability

Organizers: István Koren, Janina Bauer, Nina Graves, Birgit Penzenstadler
Location: Room 12

Time	Session
09:00-10:30	**Session 1** • Welcome and Introduction • Can We Leverage Process Data from ERP Systems for Sustainability Analyses? Dominik Schäfer, Finn Klessascheck, Timotheus Kampik and Luise Pufahl • Extending Genetic Process Discovery to Reveal Unfairness in Processes. Muskan Muskan, Felix Mannhardt and Boudewijn van Dongen • Process Sustainability Patterns for Evaluating and Developing Sustainable Process Technologies. Andreas Fritsch
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** • Process Mining Guidelines for Greenhouse Gas Emission Management in Production Processes. Ioana Costache, Oktay Turetken, Banu Aysolmaz and Karolin Winter • Towards Nudging in BPM: A Human-Centric Approach for Sustainable Business Processes. Cielo González Moyano, Finn Klessascheck, Saimir Bala, Stephan A. Fahrenkrog-Petersen and Jan Mendling • Discussion, Roadmap, and Next Steps

PODS4H – Process-Oriented Data Science for Healthcare

Organizers: Niels Martin, Carlos Fernandez-Llatas, Owen Johnson, Marcos Sepúlveda, Jorge Munoz-Gama
Location: Room 19

Time	Session
11:00-12:30	**Session 1** • Enhancing Healthcare Decision-Making with Analogy-Based Reasoning (Research Paper). Joscha Grüger, Martin Kuhn, Karim Amri and Ralph Bergmann • Insights on Prostate Cancer Treatment Pathways using Process Discovery (Case Study). Jana Vormann, Jonas Blatt, Flavio Horbach, Nils Herm-Stapelberg, Lukas Mittnacht, Patrick Delfmann, Tobias Walter and Sven Pagel • Predicting Unplanned Hospital Readmissions using Outcome-Oriented Predictive Process Mining (Research Paper). Abdulaziz Aljebreen, Allan Pang, Marc de Kamps and Owen Johnson
12:30-13:30	Lunch
13:30-15:00	**Session 2** • Predictive Insights for Personalising EGC Treatment Process - A Case Study (Case Study). Mozhgan Vazifehdoostirani, Andrei Buliga, Laura Genga, R.H.A Verhoeven and Remco Dijkman • Structural and semantic enrichment of models for the interactive discovery of clinical processes (Research Paper). Jose Luis Bayo Monton, Begoña Martinez-Salvador, Carlos Fernández-Llatas and Mar Marcos

	• Analysing Disease Trajectories of Multimorbidity through Process Mining Techniques: A Case Study (Case Study). Daniel Petrov, Thu Nguyen, Areti Manataki and Colin McCowan
15:00-15:30	Coffee-break
15:30-17:00	**Session 3** • Posters session
17:15	Buses departing for welcome reception

PQMI – Process Querying, Manipulation, and Intelligence

Organizers: Artem Polyvyanyy, Claudio Di Ciccio, Antonella Guzzo, Arthur H. M. ter Hofstede
Location: Room 16

Time	Session
09:00-10:30	**Session 1** • Opening • Keynote: Mining the Process of Process Mining: Navigating Cognition of Process Miners in Action. Irit Hadar • Root Cause Analysis Using Rule Mining on Object-Centric Event Logs. Benedikt Knopp and Wil van der Aalst
10:30-11:00	Coffee-break
11:00-12:30	**Session 2** • The Jenson-Shannon Distance Metric for Stochastic Conformance Checking. Tian Li, Sander J.J. Leemans and Artem Polyvyanyy • Representative Sampling in Process Mining: Two Novel Sampling Algorithms for Event Logs. Frederik Fonger, Niclas Nebelung, Arvid Lepsien, Milda Aleknonyte-Resch and Agnes Koschmider • A Dynamic Programming Approach for Alignments on Process Trees. Wil M.P. van der Aalst, Wied Pakusa and Christopher T. Schwanen
12:30-13:30	Lunch

13:30-15:00 **Session 3**

- An LLM-based Q&A Natural Language Interface to Process Mining. Luciana Barbieri, Kleber Stroeh, Edmundo Madeira and Wil van der Aalst
- EVErPREP: Towards an Event Knowledge Graph enhanced Workflow Model for Event Log Preparation. Peter Filipp, Rene Dorsch and Andreas Harth
- One Language to Rule them All: Behavioural Querying of Process Data using SQL. Jakob Brand, Timotheus Kampik, Cem Okulmus and Matthias Weidlich

SMA4PM – Stream Management & Analytics for Process Mining

Organizers: Marwan Hassani, Thomas Seidl, Ahmed Awad
Location: Room 15

Time	Session
09:00-10:30	**Session 1** • Continual Learning Model with Dynamic Loss for Online Next Activity Prediction. Tamara Verbeek, Ruozhu Yao and Marwan Hassani • Detect and Conquer: A Template-Based Approach for Online Control-Flow Discovery. Christian Imenkamp, Samira Akili, Matthias Weidlich and Agnes Koschmider

Tuesday – 15 October

Time	Session
09:00-09:30	**Opening** **Location:** Auditorium 81
09:10-10:30	**Keynote:** "Multi-paradigm, Online, Hierarchical Simulations to Support Process Mining" By Prof. Young-Jun Son **Location:** Auditorium 81
10:30-11:00	Coffee-break
11:00-12:30	**Session 1:** AI in Process Mining **Location:** Auditorium 81 **Chair:** Artem Polyvyanyy • LUPIN: A LLM Approach for Activity Suffix Prediction in Business Process Event Logs. V. Pasquadibisceglie, A. Appice and D. Malerba • Evaluating the Ability of LLMs to Solve Semantics-Aware Process Mining Tasks. A. Rebmann, F. Schmidt, G. Glavaš and H. van der Aa • SuTraN: an Encoder-Decoder Transformer for Full Context-Aware Suffix Prediction of Business Processes. B. Wuyts, S. Vanden Broucke and J. De Weerdt
12:30-13:30	Lunch
13:30-14:00	**Demos introduction** **Location:** Auditorium 81
14:00-15:30	**Session 2:** Assessing the Quality of Process Mining Results and Techniques **Location:** Auditorium 81 **Chair:** Francesca Zerbato

	• Generating the traces you need: a conditional generative model for Process Mining data. R. Graziosi, M. Ronzani, A. Buliga, C. Di Francescomarino, F. Folino, C. Ghidini, F. Meneghello and L. Pontieri • The Role of Log Representativeness in Estimating Generalization in Process Mining. A. Karunaratne, A. Polyvyanyy and A. Moffat • Assessing Process Mining Techniques: a Ground Truth Approach. D. Sommers, N. Sidorova and B. van Dongen
14:00-15:30	**Demo presentations** **Locations:** Room 15, Room 16, Room 18, Room 19
15:30-16:00	Coffee-break
16:00-17:30	**Session 3:** Sense-making of Process Mining Results **Location:** Auditorium 81 **Chair:** Jorge Munoz-Gamas • Towards Full Population Testing in Auditing: How Many Process Deviations Should Be Labeled? M. Laghmouch, B. Depaire and M. Jans • A Context Framework for Sense-making of Process Mining Results. T. Grisold, H. van der Aa, S. Franzoi, S. Hartl, J. Mendling, J. Vom Brocke • Discovering Changes in Cell Stability Using Process Mining: A Case Study. J. Zhou, A. Armas Cervantes, Z. Dasht Bozorgi, E. Otte, A. Polyvyanyy
16:00-17:30	**Demo presentations** **Locations:** Room 15, Room 16, Room 18, Room 19
17:30-18:00	**Doctoral Consortium preliminary meeting** **Location:** Room 10

Wednesday – 16 October

Time	Session
09:00-09:15	**Industry track opening** **Location:** Auditorium 81
09:15-10:15	**Keynote:** "Operational Excellence Beyond Processes: Expanding the Reach of Process Mining" By Martin Klenk **Location:** Auditorium 81
10:15-10:45	Coffee-break with **Innovation Track posters**
10:45-12:05	**Solution capability pitches** **Location:** Auditorium 81
12:05-12:30	**Hackathon kickoff** **Location:** Auditorium 81
12:30-13:30	Lunch with **Women in Process Mining Luncheons in partnership with Capgemini**
13:30-15:00	**Session 4**: Stochastic and Privacy-Preserving Techniques in Process Mining **Location:** Auditorium 81 **Chair:** Stephan Fahrenkrog • Stochastic Conformance Checking Based On Expected Sub-Trace Frequency. Eduardo Goulart Rocha, Sander J.J. Leemans and Wil van der Aalst • Wasserstein Weight Estimation for Stochastic Petri Nets. Tobias Brockhoff, Merih Seran Uysal and Wil van der Aalst • Differentially Private Inductive Miner. Max Schulze, Yorck Zisgen, Moritz Kirschte, Esfandiar Mohammadi and Agnes Koschmider

13:30-17:00	**Training sessions** • Celonis • SAP Signavio • Apromore • Microsoft • Evidant • Software AG / ARIS **Tutorial sessions** Check the QR code for the updated program
15:00-15:30	Coffee-break with **Innovation Track posters**
15:30-16:30	**Session 5**: Data-Driven Process Simulation **Location:** Auditorium 81 **Chair:** Luise Pufahl • AgentSimulator: An Agent-based Approach for Data-driven Business Process Simulation. Lukas Kirchdorfer, Robert Blümel, Timotheus Kampik, Han van der Aa and Heiner Stuckenschmidt • Discovery and Simulation of Data-Aware Business Processes. Orlenys López-Pintado, Serhii Murashko and Marlon Dumas
17:00	Buses departing for Tivoli
19:00	**Social dinner** **Location:** Påfuglen – Tivoli Garden

Thursday – 17 October

Time	Session
09:00-09:10	**Industry track opening** **Location:** Auditorium 81
09:10-10:30	**Industry use cases** **Location:** Auditorium 81
09:30-10:30	**Session 6:** Discovery of Object-centric Process Models **Location:** Auditorium 82 and 83 **Chair:** Orlenys Lopez Pintado • Discovering Compact, Live, and Identifier-Sound Object-Centric Process Models. Jan Niklas van Detten, Pol Schumacher and Sander J.J. Leemans • Discovery of Object-Centric Declarative Models. Axel Christfort, Andrey Rivkin, Dirk Fahland, Thomas Hildebrandt and Tijs Slaats
10:30-11:00	Coffee-break
11:00-12:30	**Industry use cases** (cont.) **Location:** Auditorium 81
11:30-12:30	**Session 7:** Resource Mining **Location:** Auditorium 82 and 83 **Chair:** Niels Martin • Decomposing Process Performance based on Actor Behavior. Eva Klijn, Irina Tentina, Dirk Fahland and Felix Mannhardt

	• Online Resource Allocation to Process Tasks under Uncertain Resource Availabilities. Michel Kunkler and Stefanie Rinderle-Ma
12:30-13:30	Lunch
13:30-15:00	**Session 8:** Complexity of Business Processes **Location:** Auditorium 81 **Chair:** Karolin Winter • Navigating Complexity: Comparing Complexity Measures with Weyuker's Properties. Patrizia Schalk, Adam Burke and Robert Lorenz • Structural Process Variety and Flexibility. Clemens Schreiber and Amine Abbad Andaloussi • Process-aware Bayesian Networks for Sequential Event Log Queries. Simon Rauch, Christian Frey, Ludwig Zellner and Thomas Seidl
13:30-15:00	**Hackathon pitches and results** **Location:** Auditorium 82 and 83
15:00-16:00	**Award ceremony and closing** **Location:** Auditorium 81
16:00	Farewell

Friday – 18 October – Doctoral Consortium

Time	Session
09:00-09:15	**Doctoral Consortium Photo** (only for DC participants) **Location:** Auditorium 83
09:15-10:30	**Keynote:** "Algorithm Engineering for PM" By Prof. Benoît Depaire **Location:** Auditorium 83
10:30-11:00	Coffee-break
11:00-12:00	**Student research pitches** **Location:** Auditorium 83
12:00-13:00	Lunch
13:00-15:50	**Roundtables** (only for DC participants) **Location:** Auditorium 83
15:50-16:00	**Closing** **Location:** Auditorium 83
18:00	**PhD Party** **Location:** S-HUSET - DTU

Innovation Track Papers

Posters for the Innovation Track papers will be on the corridor around the conference location for the entire duration of the conference.

- Event Knowledge Graphs with Ambiguity. Marco Franceschetti, Dominik Buchegger, Ronny Seiger and Barbara Weber
- Framework for Extracting Real-World Object-Centric Event Logs from Game Data. Lukas Liss, Nico Elbert, Christoph M. Flath and Wil van der Aalst
- Monitoring Cultivation Processes with Uncertain States using Remote Sensing. Man Tuen Chan, Stephan Fahrenkrog-Petersen and Jan Mendling
- Providing domain knowledge for process mining with ReWOO-based agents. Max Vogt, Peter Van der Putten and Hajo A. Reijers
- Towards an Ethogram of Exploratory Process Mining Behavior. Jessica Van Suetendael, Benoît Depaire, Mieke Jans and Niels Martin
- WISE: Unraveling Business Process Metrics with Domain Knowledge. Urszula Jessen and Dirk Fahland

Demo Papers

The accepted demo papers are arranged according to themes.

Event log generation and manipulation (room 15)

- Distributed Event Factory: A Tool for Generating Event Streams on Distributed Data Sources. H. Reiter, C. Imenkamp, A. Koschmider and W. Hasselbring
- iGEDI: interactive Generating Event Data with Intentional Features (Extended Abstract). A. Maldonado, S. Anirudh Aryasomayajula, C. M. M. Frey and T. Seidl
- LogPPL: A Tool for Probabilistic Process Mining. M. Kuhn, J. Grüger, C. Matheja and A. Rivkin
- Python-JXES: Python Implementation of JSON Serialization for XES Standard. M. Vidgof
- Work Tagger: A Labelling Companion. M. Resinas, R. Goñi-Medina, I. Beerepoot, A. del-Río-Ortega and H. A. Reijers

Frameworks, platforms and editors (room 16)

- CONFINE: Preserving data secrecy in decentralized process mining. V. Goretti, D. Basile, L. Barbaro and C. Di Ciccio
- Process Analytics Workbench (PAW). W. Wang, E. Amann, M. Matzner and P. Delfmann
- EDD: A Web-Based Editor for Declarative Process Models Using easyDeclare. G. Blasilli, L. Ferro, S. Lenti, F.M. Maggi, A. Marrella and T. Catarci
- Ebi - a Stochastic Process Mining Framework. S. J.J. Leemans, T. Li and J. N. van Detten
- DCR4Py: A PM4Py Library extension for Declarative Process Mining in Python. S. V.H. Hermansen, R. Jónsson, J. L. Kjeldsen, T. Slaats, V. P. Cosma and H. A. López-Acosta
- ProM4Py - A Python Wrapper For The ProM Framework. H. Kammerling, E. Goulart Rocha and W. van der Aalst

Process discovery, compliance, and analysis (room 18)

- Journey-to-Process Analytics: Fusing Experience with Operations Data. A. Rochlitzer, M. Meindl, R. Hadian, G. Hakomaki II, H. Leopold
- Apromore Compliance Center: A No-Code Solution to Process Compliance Management. N. Adams, A. Augusto, M. Davern and M. La Rosa
- Entropia: Measuring Log Representativeness and Generalization of Discovered Process Models. A. Karunaratne, A. Polyvyanyy and A. Moffat
- SWORD Extractor Pulling Workarounds out the Eventlog. W. van der Waal, I. van de Weerd and H. A. Reijers
- DIS-PIPE: A Tool for Data Pipeline Discovery. S. Agostinelli, D. Benvenuti, J. Rossi and A. Marrella
- dynamik: A tool for performance drift detection in business processes. V. Gallego-Fontenla, F. Milani and M. Dumas
- The CEKG: A Tool for Constructing Event Graphs in the Care Pathways of Multi-Morbid Patients. M. Naeimaei Aali, F. Mannhardt and P. Toussaint

Simulation and visualization (room 19)

- Simulating Environmental Impacts of Business Processes with SimuBridge and the SOPA Framework. F. Klessascheck, L. Bein and L. Pufahl
- CauseCheck: A Tool for Simulating Deviations in Event Logs with Known Root Causes. F. Hake, S. Schneider, N. Theofanopoulos, C. Gonzalez, P. Sie Chuah, M. Grohs and J.-R. Rehse
- EduClare – An Intelligent Tutoring Chatbot for Teaching Declarative Process Modeling. S. Nagel, A. Wolters, D.M. Riehle and P. Delfmann
- Building Process Mining Dashboards Manually or AI-assisted with Celonis Views. C. Ullrich, T. Lata and G. Benton
- A Taste of the Different Flavors of Tiramisù. A. Alman, A. Arleo, I. Beerepoot, A. Burattin, C. Di Ciccio and M. Resinas
- 3DCR: A Tool for Immersive Process Mining. J. Caballero Villalobos, H. A. López-Acosta and S. James Jensen

Social Events

14 October – Welcome Reception – Royal Library

Monday, October 14, at 18:00
Buses departing from DTU at 17:15

The Black Diamond, the Royal Danish Library
Søren Kierkegaards Pl., København

The ICPM Welcome Reception will be held at the "Black Diamond" (*Den Sorte Diamant*), the Royal Danish Library. Completed in 1999, this striking modern building is named for its black granite and glass façade, which reflects the water of the adjacent harbor. Designed by the Danish architectural firm Schmidt Hammer Lassen, the Black Diamond serves as a cultural center, housing a vast collection of books, exhibition spaces, a concert hall, and other public amenities. Its innovative design and cultural significance make it a prominent landmark in Copenhagen.

16 October – Sightseeing and Fun – Tivoli Garden

Wednesday, October 16, at 17:00
Buses departing from DTU at 17:00

Tivoli Garden, København

On Wednesday afternoon, just before dinner, there will be the opportunity to visit the Tivoli Garden in Copenhagen. Tivoli Garden is a historic amusement park located in the heart of Copenhagen. Opened in 1843, it is one of the oldest amusement parks in the world. Tivoli Garden features a mix of traditional and modern attractions, including roller coasters, carousels, live entertainment, lush gardens, and a variety of dining options. Its charming old-world atmosphere, beautifully illuminated at night, makes it a beloved destination for both locals and tourists. The park's unique blend of nostalgia and contemporary fun has inspired countless visitors, including Walt Disney, who drew inspiration from Tivoli when creating Disneyland.

16 October – Dinner – Tivoli Gardens (Påfuglen)

Wednesday, October 16, at 19:00
Buses departing from DTU at 17:00

Påfuglen Restaurant
Tivoli Garden, København

The ICPM social dinner will be held inside the Tivoli Garden, at Påfuglen. The restaurant, whose name means “The Peacock” in Danish, offers a charming and elegant dining experience with a menu that blends traditional Danish cuisine with modern culinary trends. Known for its picturesque setting and vibrant atmosphere, Påfuglen is popular among both tourists and locals, providing a delightful culinary experience amidst the historic and scenic surroundings of Tivoli Garden.

18 October – PhD Students Party – S-HUSET

Friday, October 18, starting at 18:00

Building 101, DTU
(Near the lunch location)

S-Huset is the collective name of PF's student houses, where a lot of socializing takes place. S-Huset runs several cafés, where coffee, sandwiches, and snacks are sold at student-friendly prices. With pool tables and games, it is the place to be after the day's work.

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