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SAP Signavio

# 21st International Conference on Business Process Management



Utrecht, The Netherlands



September 11-15, 2023



Need help? Ask someone with a YELLOW lanyard/keycord!



- Academiegebouw: If you do not have Eduroam, you can scan the QR code for a guest account (can be found at registration and in workshop rooms).
- TivoliVredenburg: Guests can use the public wi-fi (TivoliVredenburg).
- Oudaen: Network is open. No password required.
- Hogeschool Utrecht: Codes can be found in several locations.





# Program



The program is subject to changes and additions





# Sunday, September 10

## Doctoral Consortium & Football

### ACADEMIEGEBOUW (📍 Domplein 29)

9:30 – 10:00	Walk-in and coffee moment	<b>Participating PhD students:</b> <ul style="list-style-type: none"><li>Fabian Stiehle</li><li>Andrei Tour</li><li>Ignavio Velásquez</li><li>Igor Sáez</li><li>Sam Leewis</li><li>Peter A. François</li><li>Eli Bogdanov</li></ul>
10:00 – 11:00	Presentation + discussion of PhD proposal	
11:00 – 11:30	Coffee	
11:30 – 12:30	Presentation + discussion of PhD proposal (parallel groups)	
15:30 – 16:00	Coffee	
16:00 – 17:00	<p>Speaker: dr. Erik-Jan van der Linden, Seed Investor and Entrepreneur-in-Residence at University of Technology Eindhoven</p> <p>Title: A Smart Way for PhD students</p> <p>Abstract: Besides having great research talent and a promising research topic, PhD students need to manage themselves and their project to see this become a success. In my contribution to the Doctoral Consortium I'll draw from various sources to discuss this, such as previous experience as manager of a research institute, a national PhD program and an international summer school. Besides that, I'll use my 2022 book <i>The Smart Way</i>, which is concerned with success of young entrepreneurs, and we'll see remarkable similarities with and interesting take-aways for young researchers.</p>	
Subsequently	Dinner	

### GALGENWAARD SPORTS HALL 1 (📍 Herculesplein 341)

19:45 – 20:00	Changing rooms available	
20:00 – 20:15	Warming up	
20:15 – 20:30	Red – Blue	Black referees
20:35 – 20:50	Black – White	Blue referees
20:55 – 21:10	White – Blue	Red referees
21:15 – 21:30	Red – Black	White referees
21:35 – 21:50	Black – Blue	Red referees
21:55 – 22:10	White – Red	Black referees
22:10 – 23:00	Drinks @ De Heksenketel	



Even if you are not playing: your unwavering support from the stadium stands is invaluable, as your cheers and enthusiasm fortify our teams in their pursuit of victory. Come and support everyone from the stand!

For an elevated experience, we encourage you to partake in the post-match analysis and camaraderie at Sports Cafe De Heksenketel, where you can indulge in a selection of snacks and beverages.

TEAM RED	TEAM BLUE	TEAM BLACK	TEAM WHITE
Najah Clemens Andrea Antonio Petr Vatche Max	Veronika Chihab Mohammadreza Axel Oktay Stijn Yara	Iris Hajo David Michal Isaac Alessandro Jelmer	Jonas Únal Jose Francesco Vinicius Luca Pedro
Still some spots left! See p.24 for details.			



# Monday, September 11

## Workshops

ACADEMIEGEBOUW (📍 Domplein 29)		OUDAEN (📍 Oudegracht 99)	
8:15 – 9:00	Registration	Open from 08:30 (but no registration!)	
9:00 – 10:30	<ul style="list-style-type: none"><li>AI4BPM (Belle van Zuylenzaal)</li><li>BP-Meet-IoT + DT4BP (Westerdijkkamer)</li><li>BPMS2 (Sterrecamer)</li><li>BPI (Kanunnikenzaal)</li></ul>	<ul style="list-style-type: none"><li>OBJECTS (Couwenhovezaal)</li><li>NLP4BPM (Linteloozaal)</li></ul>	
10:30 – 11:15	Break		
11:15 – 12:45	<ul style="list-style-type: none"><li>AI4BPM (Belle van Zuylenzaal)</li><li>BP-Meet-IoT + DT4BP (Westerdijkkamer)</li><li>BPI (Kanunnikenzaal)</li></ul>	<ul style="list-style-type: none"><li>DEC2H (Houdaenkamer)</li><li>OBJECTS (Couwenhovezaal)</li><li>NLP4BPM (Linteloozaal)</li></ul>	
12:45 – 13:45	Lunch		
13:45 – 15:15	<ul style="list-style-type: none"><li>AI4BPM (Belle van Zuylenzaal)</li><li>ProDy (Westerdijkkamer)</li><li>BP-Meet-IoT + DT4BP (Sterrecamer)</li><li>BPO (Kanunnikenzaal)</li></ul>	<ul style="list-style-type: none"><li>DEC2H (Houdaenkamer)</li><li>FM-BPM (Couwenhovezaal)</li><li>NLP4BPM (Linteloozaal)</li></ul>	
15:15 – 16:00	Break		
16:00 – 17:30	<ul style="list-style-type: none"><li>BP-Meet-IoT + DT4BP (Belle van Zuylenzaal)</li><li>ProDy (Westerdijkkamer)</li><li>BPO (Kannunikenzaal)</li></ul>	<ul style="list-style-type: none"><li>FM-BPM (Couwenhovezaal)</li><li>DEC2H (Linteloozaal)</li></ul>	
DE RECHTBANK (📍 Korte Nieuwstraat 14)		OUDAEN (📍 Oudegracht 99)	
17:30 – 19:30	Workshop drinks and snacks (Only for workshop attendees! Please join the Oudaen drinks if you joined those workshops)		

# AI4BPM

Time	TITLE	AUTHORS
9:00 - 9:10	Opening	
9:10 - 10:00	Keynote. Neuro-Symbolic Artificial Intelligence and Process Mining: a Promising Marriage	Ivan Donadello
10:00 - 10:30	A Responsibility Framework for Computing Optimal Process Alignments	Matteo Baldoni, Cristina Baroglio, Elisa Marengo and Roberto Micalizio
10:30 - 11:15	Coffee break	
11:15 - 11:45	A Case for Business Process-Specific Foundation Models	Yara Rizk, Praveen Venkateswaran, Vatche Isahagian, Austin Narcomey and Vinod Muthusamy
11:45 - 12:15	An Experiment on Transfer Learning for Suffix Prediction on Event Logs	Mathieu van Luijken, Istvan Ketyko and Felix Mannhardt
12:15 - 12:45	A Discussion on Generalization in Next-Activity Prediction	Luka Abb, Peter Pfeiffer, Peter Fettke and Jana-Rebecca Rehse
12:45 - 13:45	Lunch break	
13:45 - 14:15	ProtoNER: Few shot Incremental Learning for Named Entity Recognition using Prototypical Networks	Ritesh Kumar, Saurabh Goyal, Ashish Verma and Vatche Isahagian
14:15 - 14:45	Using Reinforcement Learning to Optimize Responses in Care Processes: A Case Study of Aggression Incidents	Bart J. Verhoef and Xixi Lu
14:45 - 15:15	Open discussion & Closing	

# BPI

Time	TITLE	AUTHORS
9.00 - 9.25	Navigating Event Abstraction in Process Mining: a comprehensive analysis of sub-problems, data, and process characteristic considerations	Jungeun Lim and Minseok Song
9.25 - 9.50	State of the Art: Automatic Generation of Business Process Models	Selina Schueler and Sascha Alpers
9.50 - 10.00	Exploring SLURM Logs through Process Mining: Insights into Scientific Workflows (Short paper)	Zahra Sadeghibogar, Alessandro Berti, Marco Pegoraro and Wil M.P. van der Aalst
10.00 - 10.30	Panel on the impact of event logs processing for process analytics	Panel members: organizers + authors session
10.30 - 11.15	Coffee break	
11.15 - 11.40	Relationships between Change Patterns in Dynamic Event Attributes	Jonas Cremerius, Hendrik Patzlaff and Mathias Weske
11.40 - 12.05	Timed Alignments with Mixed Moves	Neha Rino and Thomas Chatain
12.05 - 12.45	Panel on conformance checking and behavioral patterns	Panel members: organizers + authors session



## **i** BP-meet-IoT + DT4BP

Time	TITLE	AUTHORS
9.15 – 9.30	Opening	
9.30 – 10.30	Keynote. The Internet-of-Production: Improving Production Processes Using Data-Models-in-the-Middle.	Wil van der Aalst
10.30 – 11.15	Coffee break	
11.15 – 11.40	An Object-centric Approach to Handling Concurrency in IoT-aware Processes	Florian Gallik, Yusuf Kirikkayis, Ronny Seiger and Manfred Reichert
11.40 – 12.05	An Event-Centric Metamodel for IoT-Driven Process Monitoring and Conformance Checking	Marco Franceschetti, Ronny Seiger and Barbara Weber
12.05 – 12.20	Process Mining on Sensor Location Event Data	Dominik Janssen, Felix Mannhardt and Agnes Koschmider
12.20 – 12.45	Viola: Detecting Violations of Behaviors from Streams of Sensor Data	Gemma Di Federico, Andrea Burattin and Giovanni Meroni
12.45 – 13.45	Lunch Break	
13.45 – 14.10	Analyzing Behavior in Cyber-Physical Systems in Connected Vehicles: A Case Study	Harry Herbert Beyel, Omar Makke, Oleg Gusikhin and Wil van der Aalst
14.10 – 14.15	Digital Twins workshop presentation	
14.15 – 14.40	Digital Twin of the Organization for Support of Customer Journeys and Business Processes	Wolfgang Groher and Uwe V. Riss
14.40 – 15.05	Framing the Digital Business Process Twin: From a Holistic Maturity Model to a Specific and Substantial Use Case in the Automotive Industry	Markus Rabe and Emre Kilic
15.05 – 15.15	Presentation of interactive session	
15.15 – 16.00	Coffee break	
16.00 – 17.15	Interactive session	
17.15 – 17.30	Closing	

## **i** BPMS2

Time	TITLE	AUTHORS
9:00 – 9:10	Introduction	Rainer Schmidt
9:10 – 9:35	Towards a Measurement Instrument for Assessing Capabilities when Innovating Less-Structured Business Processes	Joklan Imelda Camelia Goni and Amy van Looy
9:35 – 10:00	Integrating Social Media and Business Process Management: Exploring the Role of AI Agents and the Benefits for Agility	Mehran Majidian Eidgahi, Anne-Marie Barthe-Delanoë, Dominik Bork, Sina Namaki Araghi, Guillaume Mace-Ramete and Frédéric Bénaben
10:00 – 10:25	Design Principles for Using Business Process Management Systems	Sebastian Dunzer, Willi Tang, Nico Höchstädter, Sandra Zilker and Martin Matzner
10:25 – 10:30	Closing	Rainer Schmidt



## DEC2H

Time	TITLE	AUTHORS
11:15 – 11:25	Opening	
11:25 – 12:45	Keynote. What else can we do with temporal patterns?	Chiara Di Francescomarino
12:45 – 13:45	Lunch break	
13:45 – 14:15	Generating Event Logs from Hybrid Process Models	Anti Alman, Fabrizio Maria Maggi, Marco Montali and Andrey Rivkin
14:15 – 14:45	Pareto-Optimal Trace Generation from Declarative Process Models	Juan Camilo Rosero, Juan Francisco Diaz Frias, Hugo A. López and Luis Quesada
14:45 – 15:15	Hybrid modelling of industrial process – mining use case	Edyta Brzychczy, Krzysztof Kluza and Katarzyna Gdowska
15:15 – 16:00	Coffee Break	
16:00 – 16:30	Empirical Evidence of DMN Errors in the Wild – An SAP Signavio Case Study	Carl Corea, Timotheus Kampik and Patrick Delfmann
16:30 – 17:00	Open discussion & closing	



## FM-BPM

Time	TITLE	AUTHORS
13.45 – 15.15	Opening	
	Model Independent Error Bound Estimation for Conformance Checking Approximation	Mohammadreza Fani Sani, Martin Kabierski, Sebastiaan van Zelst and Wil van der Aalst
	Repair of Unsound Data-Aware Process Models	Matteo Zavatteri, Davide Bresolin and Massimiliano de Leoni
	Equivalence of Data Petri Nets with Arithmetic	Marco Montali and Sarah Winkler
	Formal Specification of Business Processes in LTL Modulo Theories over Finite Traces	Luca Geatti, Alessandro Gianola and Nicola Gigante
	Non-Automata Based Conformance Checking of Declarative Process Specifications Based on ASP	Isabelle Kuhlmann, Carl Corea and John Grant
	Reasoning about Knowledge in BPM: Call for a Systematic Approach	Alessandro Burigana and Marco Montali
16.00 – 17.30	Invited talk: What Can Probabilistic Model Checking Offer to BPM?	Joost-Pieter Katoen
	Closing	





## NLP4BPM

Time	TITLE	AUTHORS
9:00 – 10:30	Text-Aware Predictive Process Monitoring of Knowledge-Intensive Processes: Does Control Flow Matter?	Katharina Brenning, Kay Benkert, Bernd Löhr, and Oliver Müller
	Collecting Activities and States in German Business Process Models	Ralf Laue, Kristin Kutzner, and Martin Läuter
	Towards a Machine Learning-Based Approach for Recommending Next Elements in BPMN Models	Viktoria Farkas
10:30 – 11:15	Coffee break	
11:15 – 12:45	Abstractions, Scenarios, and Prompt Definitions for Process Mining with LLMs: A Case Study	Alessandro Berti, Daniel Schuster, and Wil M. P. van der Aalst
	Large Language Models can accomplish Business Process Management Tasks	Michael Grohs, Luka Abb, Nourhan Elsayed, and Jana-Rebecca Rehse
	Chit-Chat or Deep Talk: Prompt Engineering for Process Mining	Urszula Jessen, Michal Sroka, and Dirk Fahland
12:45 – 13:45	Lunch break	
13:45 – 15:15	NLP4BPM Roundtable: The Impact of Large Language Models on Business Process Management	Participation is open to all who are interested



## OBJECTS

Time	TITLE	AUTHORS
9.00 – 10.30	Opening	
	Addressing Convergence, Divergence, and Deficiency Issues	Jan Niklas Adams and Wil van der Aalst
	Predictive Analytics for Object-centric Processes: Do Graph Neural Networks Really Help?	Riccardo Galanti and Massimiliano de Leoni
	Modeling, Exploring and Querying Object-Centric Process Logs – Relational v. Graph Databases	Akhil Kumar Kumar and Pnina Soffer
	A Model-Driven Engineering perspective for the Object-Centric Event Data (OCED) metamodel	Daniel Calegari and Andrea Delgado
	Typed Petri Nets with Variable Arc Weights	Irina A. Lomazova, Alexey A. Mitsyuk and Andrey Rivkin
11.15 – 12.45	Invited talk: From Cases to Objects and Relations – and Beyond	Dirk Fahland
	Discussion and closing	

# ProDy

Time	TITLE	AUTHORS
13.45 – 15.15	Organizational Reactions to Unintended Affordance-Based Process Change	Carolyn Vollenberg, Ralf Plattfaut and André Coners
	Ambidextrous Business Process Management: Unleashing the Dual Power of Innovation and Efficiency	Piotr Sliż
	Adding Dynamic Simulation to Business Process Modeling via System Dynamics	Henderik A. Proper, Quan Zhu, Pascal Ravesteijn and Wim Gielingh
	A method for Creating Process Architecture: Driving Organizational Change	Emerson Lima Aredes, Marina Lourenção, Roger Burlton, Hajo Reijers and Silvia Ines Dallavalle Pádua
15.15 – 16.00	Coffee break	
16.00 – 17.30	Panel: Looking back on the last 20 Years of Research on Change, Drift, and Dynamics of Organizational Processes: What's coming next?	Moderator: Bastian Wurm Participants: Daniel Beverungen, Fleur Deken, Jan Recker, Moe Wynn

# BPO

Time	TITLE	AUTHORS
13.45 – 14.00	Intro	
14.00 – 14.45	Keynote. On the Central Role of Simulation in Business Process Optimization.	Marlon Dumas
14.45 – 15.15	Timed Process Interventions: Causal Inference vs. Reinforcement Learning	Hans Weytjens, Jochen De Weerd and Wouter Verbeke
15.15 – 16.00	Coffee break	
16.00 – 16.30	Towards Data-driven Business Process Redesign through the Lens of Process Mining Case Studies	Zeping Wang, Rehan Syed and Chun Ouyang
16.30 – 17.00	Analyzing the Devil's Quadrangle of Process Instances through Process Mining	Ignacio Velásquez and Marcos Sepúlveda
17.00 – 17.30	Group discussion: What should we optimize about business processes?	



# Tuesday, September 12

## Main Conference @TivoliVredenburg

	MAIN STAGE - HERTZ	CLOUD NINE	CLUB NINE
8:30 – 9:00	Registration @ Entrance TivoliVredenburg		
9:00 – 9:20	Opening		
9:20 – 10:00	<b>Keynote Marc Kaptein (Pfizer):</b> Process Optimization Saves Lives! (chair: Christian Janiesch)		
10:00 – 10:30	Break @ Park 6		
10:30 – 12:30	<b>Main session 1: Design patterns and modelling</b> (chair: Adela del Río Ortega) <ul style="list-style-type: none"><li>Not Here, But There: Human Resource Allocation Patterns (Goel et al.)</li><li>POWL: Partially Ordered Workflow Language (Kourani &amp; Van Zelst)</li><li>Benevolent Business Processes – Design Guidelines Beyond Transactional Value (Rosemann et al.)</li><li>Action-Evolution Petri Nets: a Framework for Modeling and Solving Dynamic Task Assignment Problems (Lo Bianco et al.)</li></ul>	<b>BPM forum papers 1</b> <ul style="list-style-type: none"><li>Foundations of Collaborative Declare</li><li>Execution Semantics for Process Choreographies with Data</li><li>Declarative Choreographies with Time and Data</li><li>An SQL-Based Declarative Process Mining Framework for Analyzing Process Data Stored in Relational Databases</li><li>Zooming in for Clarity: Towards low-code modeling for Activity Data Flow</li><li>Analytics Pipeline for Process Mining on Video Data</li><li>Adding the sustainability dimension in process mining discovery algorithms evaluation</li></ul>	Journal first session 1 (see next page for details)
12:30 – 14:00	Lunch @ Park 6		
14:00 – 15:30	<b>Main session 2: Simulation and performance metrics</b> (chair: Andrea Marella) <ul style="list-style-type: none"><li>Investigating the Influence of Data-aware Process States on Activity Probabilities in Simulation Models: Does Accuracy Improve? (de Leoni et al.)</li><li>From Text to Performance Measurement: Automatically Computing Process Performance using Textual Descriptions and Event Logs (Resinas et al.)</li><li>Can I Trust My Simulation Model? Measuring the Quality of Business Process Simulation Models (Chapela-Campa et al.)</li></ul>	<b>RPA forum 1</b> <ul style="list-style-type: none"><li>What Are You Gazing At? An Approach to Use Eye-tracking for Robotic Process Automation</li><li>Accelerating The Support of Conversational Interfaces For RPAs Through APIs</li><li>Migrating from RPA to Backend Automation: An Exploratory Study</li></ul>	<b>Educators forum</b> <ul style="list-style-type: none"><li>The Design and Delivery of a Holistic BPM Education Program</li><li>Teaching BPM fundamentals: a project-based hands-on course for process-driven systems modeling and development</li></ul>
15:30 – 16:00	Break @ Park 6		
16:00 – 17:30	<b>Main session 3: Cognitive aspects and knowledge-intensive processes</b> (chair: Jana-Rebecca Rehse) <ul style="list-style-type: none"><li>On the Cognitive Effects of Abstraction and Fragmentation in Modularized Process Models (Schreiber et al.)</li><li>PEM4PPM: A Cognitive Perspective on the Process of Process Mining (Sorokina et al.)</li><li>Deviation from Standards and Performance in Knowledge-Intensive Processes: Evidence from the Process of Selling Customized IT Solutions (Monashev et al.)</li></ul>	<b>Tutorial 1</b> (chair: Michael Rosemann) Natural Language Processing for Business Process Analysis (Van der Aa, Leopold, Busch and Rebmann)	<b>Educators forum</b> <ul style="list-style-type: none"><li>Bridging the Gap: An Evaluation of Business Process Management Education and Industry Expectations</li><li>Digital Case Study: Augmented Process Analysis and Optimization</li><li>Managing BPM Projects and their Implications on Organizations – Experiences from Research and Teaching</li></ul>
17:30 – 19:30	Drinks and light snacks @ Park 6		
	ACADEMIEGEBOUW (📍 Domplein 29)		
16:30 – 19:00	Steering committee meeting (Sterrecamer)		
19:00 – 21:00	Steering committee dinner (Huiskamer)		



## **i** Journal first – session 1

Time	TITLE	AUTHORS
10.30	An approach for analyzing business process execution complexity based on textual data and event log	Ünal Aksu and Aleksandra Revina
10.45	Predictive compliance monitoring in process-aware information systems: State of the art, functionalities, research directions	Stefanie Rinderle-Ma, Karolin Winter and Janik-Vasily Benzin
11.00	Normalizing object-centric process logs by applying database principles	Akhil Kumar, Prnina Soffer and Arava Tsoury
11.15	Designing secure business processes for blockchains with SecBPMN2BC	Julius Köpke, Giovanni Meroni and Mattia Salnitri
11.30	Significant Stochastic Dependencies in Process Models	Sander J.J. Leemans, Lisa L. Mannel and Natalia Sidorova
11.45	A Direct Data Aware LSTM Neural Network Architecture for Complete Remaining Trace and Runtime Prediction	Björn Rafn Gunnarsson, Seppe Vanden Broucke and Jochen De Weerd
12.00	Creating business value with process mining	Peyman Badakhshan, Bastian Wurm, Thomas Crisold, Jerome Geyer-Klingenberg, Jan Mendling and Jan Vom Brocke
12.15	Efficient Edge Filtering of Directly-Follows Graphs for Process Mining	David Chapela-Campa, Marlon Dumas, Manuel Mucientes and Manuel Lama

## **i** Journal first – session 2

Time	TITLE	AUTHORS
10.30	The biggest business process management problems to solve before we die	Iris Beerepoot et al.
10.45	Methods that bridge business models and business processes: a synthesis of the literature	Paola Lara Machado, Montijn van de Ven, Banu Aysolmaz, Alexia Athanasopoulou, Baris Ozkan and Oktay Turetken
11.00	Conformance checking of process event streams with constraints on data retention	Rashid Zaman, Marwan Hassani and Boudewijn Van Dongen
11.15	ProcessGAN: Supporting the creation of business process improvement ideas through generative machine learning	Christopher van Dun, Linda Moder, Wolfgang Kratsch and Maximilian Röglinger
11.30	Quantifying chatbots' ability to learn business processes	Christoph Kecht, Andreas Egger, Wolfgang Kratsch and Maximilian Roeglinger
11.45	Extracting Reusable Fragments From Data-Centric Process Variants	Rik Eshuis
12.00	Security and privacy concerns in cloud-based scientific and business workflows: A systematic review	Nafiseh Soveizi, Fatih Turkmen and Dimka Karastoyanova
12.15	Process fragments discovery from emails: Functional, data and behavioral perspectives discovery	Marwa Elleuch, Oumaima Alaoui Ismaili, Nassim Laga and Walid Gaaloul



# Wednesday, September 13

## Main Conference @ TivoliVredenburg

	MAIN STAGE - HERTZ	CLOUD NINE	CLUB NINE
8:30 – 9:00	Registration @ Entrance TivoliVredenburg		
9:00 – 10:00	<b>Keynote Marta Kwiatkowska:</b> Formal methods and robust machine learning in BPM (chair: Andrea Burratin)		
10:00 – 10:30	Break @ Park 6		
10:30 – 12:30	<b>Main session 4: Event log manipulation</b> (chair: Avigdor Gal) <ul style="list-style-type: none"><li>Event Abstraction for Partial Order Patterns (Li et al.)</li><li>Inferring Missing Entity Identifiers from Context using Event Knowledge Graphs (Swevels et al.)</li><li>Context-Based Activity Label-Splitting (Van Zelst et al.)</li><li>A Novel Multi-Perspective Trace Clustering Technique for IoT-enhanced Processes: A Case Study in Smart Manufacturing (Bertrand et al.)</li></ul>	<b>BPM forum papers 2</b> <ul style="list-style-type: none"><li>Predicting Unseen Process Behavior Based on Context Information from Compliance Constraints</li><li>Resource Allocation in Recommender Systems for Global KPI Improvement</li><li>Steady State Estimation for Business Process Simulations</li><li>The Interplay Between High-Level Problems And The Process Instances That Give Rise To Them</li><li>Optimizing the Solution Quality of Metaheuristics through Process Mining based on Selected Problems from Operations Research</li><li>Trusted Compliance Checking on Blockchain with Commitments: a Model-driven Approach</li><li>The dpex-Framework: Towards Full WFMS Support for Decentralized Process Execution</li><li>A Reference Data Model to Specify Event Logs for Big Data Pipeline Discovery</li></ul>	Journal first session 2 (see previous page for details)
12:30 – 14:00	Lunch @ Park 6	Junior Researchers Mentoring Session (separate area of Park 6)	
14:00 – 15:30	<b>BPM Demos and Resources @ Park 6</b> (see next page for details)	<b>RPA Forum 2</b> Panel discussion on the future of RPA	<b>Blockchain forum 1</b> <ul style="list-style-type: none"><li>Look but don't Touch: On the Impalpable Bond between Blockchain and Process (Keynote) (Di Ciccio)</li><li>Towards Object-centric Process Mining for Blockchain Applications (Hobeck &amp; Weber)</li></ul>
15:30 – 16:00	Break @ Park 6		
16:00 – 17:30	<b>Main session 5: Anomalies</b> (chair: Wil van der Aalst) <ul style="list-style-type: none"><li>Does This Make Sense? Machine Learning-based Detection of Semantic Anomalies in Business Processes (Caspary et al.)</li><li>DyLoPro: Profiling the Dynamics of Event Logs (Wuyts et al.)</li><li>The Impact of Process Complexity on Process Performance: A Study using Event Log Data (Vidgof et al.)</li></ul>	<b>RPA Forum 3</b> <ul style="list-style-type: none"><li>Is RPA Causing Process Knowledge Loss? Insights from RPA Experts</li><li>A Business Model of Robotic Process Automation</li></ul>	<b>Tutorial 2</b> (chair: Michael Rosemann) Task Support for Process Mining: From Formulating Questions to Evaluating Results (Beerepoot, Zerbato, Weber and Soffer)
	SPOORWEGMUSEUM (📍 <a href="#">Maliebaanstation 16</a> )		
18:30 – 19:00	Optional: 2.7km guided walk from TivoliVredenburg to Spoorwegmuseum (see p.25 for route map)		
19:00 – 23:00	Conference dinner		





# BPM Demos and Resources

TITLE	AUTHORS
An uncertainty-aware event log of network traffic	Gal Engelberg, Moshe Hadad, Marco Pegoraro, Pnina Soffer, Ethan Hadar and Wil M.P. van der Aalst
A Tool for Visualizing Costs of Process Variants through Directed Rooted Trees	Ignacio Velásquez and Marcos Sepúlveda
SimuBridge: Discovery and Management of Process Simulation Scenarios	Bein Leon, Finn Klessascheck, Sviatlana Nepeina, Christian Warmuth, Timotheus Kampik and Luise Pufahl
BPM Hub: An Open Collection of UI logs	Antonio Martínez Rojas, Hajo A. Reijers and José González Enríquez
A Collection of Simulated Event Logs for Fairness Assessment in Process Mining	Timo Pohl, Alessandro Berti, Mahnaz Sadat Qafari and Wil M.P. van der Aalst
Internet of Processes and Things: A Repository for IoT-Enriched Event Logs in Smart Environments	Matthias Ehrendorfer, Yannis Bertrand, Lukas Malburg, Juergen Mangler, Joscha Grüger, Stefanie Rinderle-Ma, Ralph Bergmann and Estefania Serral Asensio
SLURMminer: A Tool for SLURM System Analysis with Process Mining	Zahra Sadeghibogar, Alessandro Berti, Marco Pegoraro and Wil M.P. van der Aalst
Alignment Approximator: A ProM Plug-In to Approximate Conformance Statistics	Mohammadreza Fani Sani, Juan J. Garza Gonzalez, Sebastiaan van Zelst and Wil van der Aalst
BIG GUI: a tool for building and analysing instance graphs	Claudia Diamantini, Laura Genga, Alex Mircoli and Domenico Potena
The Droid You're Looking For: C-4PM, a Conversational Agent for Declarative Process Mining	Yago Fontenla-Seco, Sarah Winkler, Alessandro Gianola, Marco Montali, Manuel Lama Penin and Alberto Bugarín-Diz
Process-pattern.app – A collection of business process redesign patterns	Tobias Fehrer
BPMN Inspector: A Tool for Extracting Features from BPMN Models	Ivan Compagnucci, Flavio Corradini, Fabrizio Fornari and Barbara Re
From LTL on Process Traces to Finite-state Automata	Francesco Chiariello, Fabrizio Maria Maggi and Fabio Patrizi
The Social Process Mining Cockpit: A Collaboration Pattern Detection Tool for Enterprise Collaboration Systems	Jonas Blatt, Patrick Delfmann, Martin Just and Petra Schubert
BPMN2Constraints: Breaking Down BPMN Diagrams into Declarative Process Query Constraints	Arvid Bergmann, Adrian Rebmann and Timotheus Kampik
DALG: The Data Aware Event Log Generator	David Jilg, Joscha Grüger, Tobias Geyer and Ralph Bergmann





# Thursday, September 14

## Main Conference @TivoliVredenburg

	MAIN STAGE - HERTZ	CLOUD NINE	CLUB NINE
8:30 – 9:00	Registration @ Entrance TivoliVredenburg		
9:00 – 10:00	<b>Keynote Matthias Weidlich:</b> Database systems and BPM (chair: Chiara Di Francescomarino)		
10:00 – 10:30	Break @ Park 6		
10:30 – 12:30	<b>Main session 6: Compliance and conformance</b> (chair: Claudio Di Ciccio) <ul style="list-style-type: none"><li>Approximating Multi-Perspective Trace Alignment Using Trace Encoding (Gianola et al.)</li><li>Efficient Optimal Alignment between Dynamic Condition Response Graphs and Traces (Christfort &amp; Slaats)</li><li>Polynomial-Time Conformance Checking for Process Trees (Rocha &amp; Van der Aalst)</li><li>Verifying Resource Compliance Requirements From Natural Language Text Over Event Logs (Mustroph et al.)</li></ul>	<b>BPM forum papers 3</b> <ul style="list-style-type: none"><li>Conversational Process Modelling: State of the Art, Applications, and Implications in Practice</li><li>Large Language Models for Business Process Management: Opportunities and Challenges</li><li>Towards a Theory on Process Automation Effects</li><li>The Impact of Leadership on Business Performance: The Role of Process Performance</li><li>Process Mining and the Transformation of Management Accounting: A Maturity Model for a Holistic Process Performance Measurement System</li><li>Business Process Management Maturity and Process Performance – A Longitudinal Study</li><li>From Automatic Workaround Detection to Process Improvement: A Case Study</li><li>Detecting Weasels at Work: A Theory-driven Behavioural Process Mining Approach</li></ul>	<b>RPA Forum 4</b> <ul style="list-style-type: none"><li>Automating Computer Software Validation in Regulated Industries with Robotic Process Automation</li><li>Exploring Customer Journey Mining and RPA: Prediction of Customers' Next Touchpoint</li><li>SiDiTeR: Similarity Discovering Techniques for Robotic Process Automation</li></ul>
12:30 – 14:00	Lunch @ Park 6		
14:00 – 15:30	<b>Main session 7: Process discovery</b> (chair: Dirk Fahland) <ul style="list-style-type: none"><li>Incremental Discovery of Process Models Using Trace Fragments (Schuster et al.)</li><li>Interactive Multi-Interest Process Pattern Discovery (Vazifehdoostirani et al.)</li><li>Agent Miner: An Algorithm for Discovering Agent Systems from Event Data (Tour et al.)</li></ul>	<b>Tutorial 3</b> (chair: Sietse Overbeek) Using Large Language Models in Business Processes (Grisold, vom Brocke, Kratsch, Mendling and Vidgof)	<b>Educators forum</b> <ul style="list-style-type: none"><li>Keynote on Scholarship of Teaching and Learning (SoTL)</li><li>Discussion on the future of the educator's forum</li></ul>
15:30 – 16:00	Break @ Park 6		
16:00 – 17:30	<b>Main session 8: Real world applications</b> (chair: Amine Abbad Andaloussi) <ul style="list-style-type: none"><li>Stochastic-Aware Comparative Process Mining in Healthcare (Mazhar et al.)</li><li>Increasing RPA Adoption: An Experiment on Countermeasures for Status Quo Bias (Codefroind et al.)</li><li>Process Channels: A New Layer for Process Enactment Based on Blockchain State Channels (Stiehle &amp; Weber)</li></ul>	<b>Blockchain forum 2</b> <ul style="list-style-type: none"><li>Loose Collaborations on the Blockchain: Survey and Challenges (Lichtenstein et al.)</li><li>Towards an Understanding of Trade-offs Between Blockchain and Alternative Technologies for Inter-Organizational Business Processes (Kjær et al.)</li><li>ChorSSI: a BPMN-Based Execution Framework for Self-Sovereign Identity Systems on Blockchain (Cippitelli et al.)</li></ul>	
17:30 – 18:00	Closing		
	HAPPS (📍 Oudegracht aan de Werf 73)		
18:30 – 19:00	Walk in		
From 19:00	Dinner		



# Friday, September 15

## Industry Day @Hogeschool Utrecht

Hogeschool Utrecht (📍 <a href="#">Heidelberglaan 15</a> )					
9:00 – 9:30	Registration				
9:30 – 9:45	Opening address Pascal Ravestijn (HL15-0.055)				
9:45 – 10:30	Keynote Jan vom Brocke (HL15-0.055): Generating Business Value with Business Process Management (BPM) – How to Engage with Universities to Continuously Develop BPM Capabilities				
10:30 – 11:10	Panel discussion between business professionals & academics (HL15-0.055) <ul style="list-style-type: none"><li>• Jasper van Hattem, Value Manager, Apolix</li><li>• Sandy Kemsley, Industry Analyst, Kemsley Design Ltd.</li><li>• Jan vom Brocke, University of Münster, Germany</li><li>• Jason Dietz, Head of global Process Architecture, Tesco</li></ul>				
11:10 – 11:30	Break				
11:30 – 12:30	Collaborative Workshops on Company Challenges (pt. 1):				
	<i>Challenge</i>	Air France KLM Martinair Cargo	Tesco	GEMMA at municipalities	Dutch Railways (NS)
	<i>Room</i>	HL15-1.050	HL15-1.056	HL15-1.058	HL15.1.080
	<i>Company representative(s)</i>	Eric Beerman & Rob Zeilstra	Jason Dietz & Eric Roovers	Eelco Zomer	Joris Mens
	<i>Facilitator</i>	André Veelders	Arjen Maris	Suzie Joku	Anand Sheombar
12:30 – 13:30	Lunch				
13:30 – 15:00	Collaborative Workshops on Company Challenges (pt. 2): see above				
15:00 – 15:30	Plenary closing session – presenting the findings				
From 15:30	Network reception				



# Venues



# Venue workshops (1/2)



Academiegebouw  
Domplein 29, 3512 JE Utrecht



September 11, 2023



# Venue workshops (2/2)



Stadskasteel Oudaen  
Oudegracht 99, 3511 AE Utrecht



September 11, 2023





# Venue

## main conference



TivoliVredenburg  
Vredenburgkade 11, 3511 WC Utrecht



September 12-14, 2023





# Venue industry day



Heidelberglaan 15  
Heidelberglaan 15, 3584 CH Utrecht



September 15, 2023



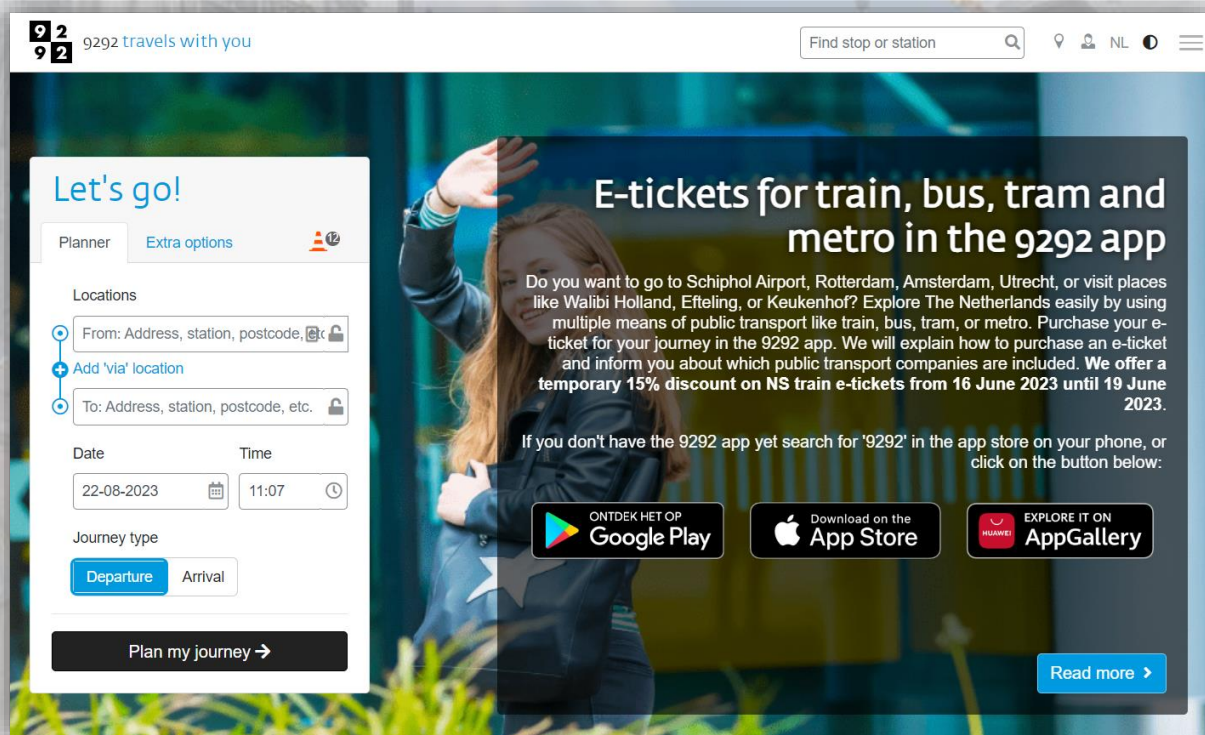


# **Practical matters**



# Travelling in Utrecht

## how to get around



**9292** 9292 travels with you

Find stop or station

### Let's go!

Planner **Extra options**

Locations

From: Address, station, postcode, etc.

+ Add 'via' location

To: Address, station, postcode, etc.

Date: 22-08-2023 Time: 11:07

Journey type

Departure Arrival

Plan my journey →

### E-tickets for train, bus, tram and metro in the 9292 app

Do you want to go to Schiphol Airport, Rotterdam, Amsterdam, Utrecht, or visit places like Walibi Holland, Efteling, or Keukenhof? Explore The Netherlands easily by using multiple means of public transport like train, bus, tram, or metro. Purchase your e-ticket for your journey in the 9292 app. We will explain how to purchase an e-ticket and inform you about which public transport companies are included. **We offer a temporary 15% discount on NS train e-tickets from 16 June 2023 until 19 June 2023.**

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For public transport: check out the [9292 website](#) or directly download the app.

Or rent a bike like a true Dutchie! Check out bike rental locations [here](#).





# Football Tournament details



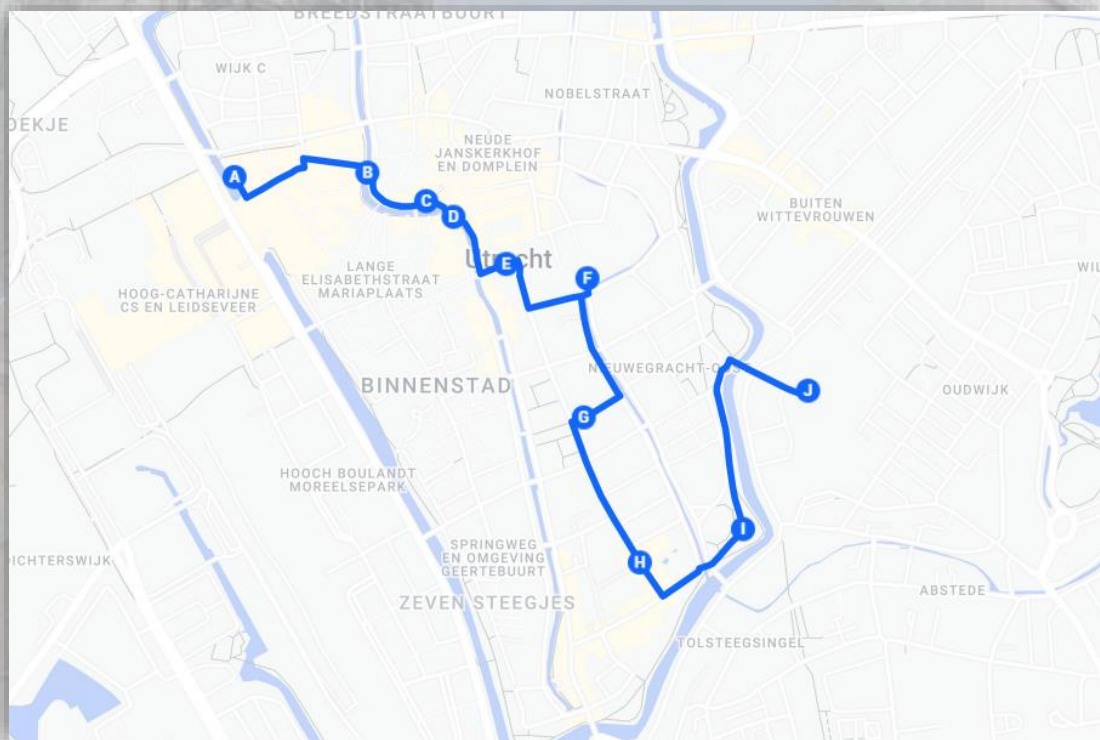
Sportcentrum Galgenwaard  
Herculesplein 341, 3584 AA Utrecht



Players: bring indoor sports shoes, shorts, a shirt in the colour of your team, and leave your injuries at home.



# Walk to Spoorwegmuseum route map (2.7km)



Find the map with locations [here](#).





# Photo wall jump and win



Find the photo wall in the break area and shoot a picture as if you are jumping into the canal. Post it on Twitter or LinkedIn with the hashtag #BPM2023 and win a fabulous prize!







# Recommendations

# Open Monument Day

## visit heritage



September 9-10, 2023



Monuments everywhere in the country open their doors



Every year on the second weekend of September, thousands of beautiful monuments throughout the Netherlands are freely accessible to everyone. Visit, among others, the gorgeous Bartholomeus Hospital, our university's own botanical gardens and fort, or wonderful Central Museum.





# Street Art

## unique murals



Everywhere throughout the city. Find the overview [here](#).



Utrecht is full of amazing murals. You will find the most beautiful works during your walk or bike ride in the city center and in the neighborhoods.





# De Stijl

## the art movement



Five kilometer walking route taking you past key Rietveld sites. Download it [here](#).



Utrecht is where the world-famous furniture designer and architect Gerrit Rietveld was born. He was one of the big innovators of the well-known art movement called 'De Stijl' (Dutch for The Style). The walking route takes you to the famous Rietveld Schröderhuis, the Central Museum, Rietveld's furniture workshop, and more.



# Catharijneconvent museum about Christianity



Museum Catharijneconvent  
Lange Nieuwstraat 38, 3512 PH Utrecht



This oasis of art and culture is located in the centre and in walking distance from the Dom. The Catharijneconvent Museum tells the fascinating story of the past and present of Christianity in the Netherlands. With a collection consisting of Protestant and Catholic art and cultural objects, there is no other museum like this in the entire world. It boasts paintings by Rembrandt, Pieter Saenredam and Jan van Scorel, among others.





# Utrecht's canals and shipyards unique in the world



Oudegracht 0  
3511 AZ Utrecht



The 12th Century Oudegracht was built to change the course of the Oude Rijn river. Connecting the river Vecht in the north to the Vaartsche Rijn in the south, the Oudegracht was destined to become an elongated harbour. Large city castles were built along the canal and in the 13th Century, shipyards were built as second streets at water level. The deep cellars, serving as storage spaces, ran through to below the houses. Today, the canals and shipyards are home to shops, restaurants and private residences.





## **i** Scientific organization

Main conference PC chairs	<ul style="list-style-type: none"><li>• Chiara Di Francescomarino</li><li>• Andrea Burratin</li><li>• Christian Janiesch</li><li>• Shazia Sadiq</li></ul>
Workshop chairs	<ul style="list-style-type: none"><li>• Jochen De Weerd</li><li>• Luise Pufahl</li></ul>
Demos and resources chairs	<ul style="list-style-type: none"><li>• Tijs Slaats</li><li>• Andrés Jiménez Ramírez</li><li>• Karolin Winter</li></ul>
Industry day chairs	<ul style="list-style-type: none"><li>• Arjen Maris</li><li>• Willemijn van Haeften</li></ul>
Blockchain forum chairs	<ul style="list-style-type: none"><li>• Julius Köpke</li><li>• Orlenys López Pintado</li></ul>
RPA forum chairs	<ul style="list-style-type: none"><li>• Ralf Plattfaut</li><li>• Jana-Rebecca Rehse</li></ul>
Education forum chairs	<ul style="list-style-type: none"><li>• Jorge Munoz-Gama</li><li>• Karazyna Gdowska</li><li>• Koen Smit</li><li>• Jan Martijn van der Werf</li><li>• Fernanda Gonzalez-Lopez †</li></ul>
Tutorial chairs	<ul style="list-style-type: none"><li>• Michael Rosemann</li><li>• Sietse Overbeek</li></ul>
Doctoral Consortium chairs	<ul style="list-style-type: none"><li>• Dirk Fahland</li><li>• Barbara Weber</li><li>• Johan Versendaal</li></ul>
Journal first track chairs	<ul style="list-style-type: none"><li>• Mieke Jans</li><li>• Henrik Leopold</li></ul>
Publicity chairs	<ul style="list-style-type: none"><li>• Iris Beerepoot</li><li>• Andrea Delgado</li><li>• Mahendrawati ER</li></ul>
Diversity and inclusion chairs	<ul style="list-style-type: none"><li>• Shazia Sadiq</li><li>• Jens Gulden</li><li>• Adela del Río Ortega</li></ul>
Proceedings chairs	<ul style="list-style-type: none"><li>• Xixi Lu</li><li>• Felix Mannhardt</li></ul>

## **i** Local organization (recognized by the YELLOW lanyards/keycards)

General chair	<ul style="list-style-type: none"><li>• Hajo Reijers</li></ul>
Organization team	<ul style="list-style-type: none"><li>• Inge van de Weerd</li><li>• Jan Martijn van der Werf</li><li>• Pascal Ravesteijn</li><li>• Xixi Lu</li><li>• Iris Beerepoot</li><li>• Sietse Overbeek</li><li>• Jens Gulden</li><li>• Nico Brand</li></ul>