The Fourth International Workshop on Process Querying (PQ 2019) aims to provide a high-quality forum for researchers and practitioners to exchange research findings and ideas on methods and practices in the area of process analysis, management, and querying. Process querying studies (automated) methods, techniques, and tools for managing, e.g., filtering, inquiring, manipulating, or updating, models that describe observed and/or envisioned processes, and relationships between the processes with the ultimate goal of converting process-related information into decision-making capabilities. Process querying research spans a range of topics from theoretical studies of algorithms and the limits of computability of process querying techniques to practical issues of implementing process querying technologies in software. Process querying techniques have broad application in Business Process Management and Process Mining. Examples of practical problems tackled using process querying include business process compliance management, business process weakness detection, process variance management, process model translation, syntactical correctness checking, process model comparison, infrequent behavior detection, process instance migration, process monitoring, process reuse, and process standardization.

PQ 2019 will be held in conjunction with the 17th Int. Conference on Business Process Management (BPM 2019).

WORKSHOP TOPICS

The main topics relevant to the PQ workshop include, but are not limited to:

- Process querying methods in Business Process Management
- Process mining methods for solving process querying tasks, and vice versa
- Behavioral and structural methods for process querying
- Imperative and declarative process querying methods
- Exact and approximate process querying methods
- Expressiveness of process querying methods
- Decidability and complexity of process querying methods
- Process query languages and notations
- Indexing for fast process querying
- Empirical evaluation and validation of process querying methods
- Label management in process querying
- Information retrieval methods in process querying
- Process querying of big (process) data
- Meta-models and architectures for process querying
- Automatic management of process models, e.g., process model repair
- Automatic management of process model collections
- Event log querying
- Event stream querying
- Process data querying for model discovery
- Process data querying for compliance checking
- Big data querying for event log generation
- Querying ontologies for semantic process definition
- Process performance querying
- Multi-perspective process querying methods, e.g., querying process resources, data, etc.
- Process querying and rich ontology annotations
- Applications of process querying methods for process compliance, standardization, reuse, etc.
- Experience reports from implementations of process querying tools
- Case studies in process querying

SUBMISSION INSTRUCTIONS

Prospective authors are invited to submit papers for presentation in any of the areas listed above. The paper selection will be based upon the relevance of a paper to the main topics as well as upon its quality and potential to generate relevant discussion.
Authors are requested to prepare submissions according to the format of the Lecture Notes in Business Information Processing (LNBIP) series by Springer (http://www.springer.com/computer/lncs?SGWID=0-164-6-791344-0). Submissions must be in English and must not exceed 12 pages (including figures, bibliography and appendices). Each paper should contain a short abstract, clarifying the relation of the paper with the main topics (preferably using the list of topics above), clearly state the problem being addressed, the goal of the work, the results achieved, and the relation to other work. Papers should be submitted electronically as a self-contained PDF file via submission system (https://easychair.org/conferences/?conf=bpm2019). When submitting your paper, in the submission system, please select the name of workshop track "Workshop on Process Querying". Submissions must be original contributions that have not been published previously, nor already submitted to other conferences or journals in parallel with this workshop.

PUBLICATION

All workshop papers will be published by Springer as a post-workshop proceedings volume in the series Lecture Notes in Business Information Processing (LNBIP). These proceedings will be made available to all registered participants approximately four months after the workshop, while preliminary proceedings will be distributed during the workshop. For each accepted paper, at least one author must register for the workshop and present the paper.

SPECIAL ISSUE

Authors of selected papers in PQ 2019 will be invited to submit revised and extended versions of their work for a special issue in the Journal on Data Semantics (JoDS). This special issue is organized together with the chairs of the workshop on DCelarative, DECision and Hybrid approaches to processes (DEC2H), which is also held in conjunction with BPM 2019.

KEY DATES

- Submission deadline: 24 May 2019
- Notification deadline: 28 June 2019
- Camera-ready papers deadline: 12 July 2019
- Workshop: 2 September 2019

COMMITTEES

ORGANIZERS

Artem Polyvyanyy, The University of Melbourne
Claudio Di Ciccio, Vienna University of Economics and Business
Arthur ter Hofstede, Queensland University of Technology

PROGRAM COMMITTEE (TENTATIVE)

Agnes Koschmider, Karlsruhe Institute of Technology
Amal Elgammal, Cairo University
Artem Polyvyanyy, The University of Melbourne
Arthur ter Hofstede, Queensland University of Technology
Boudewijn van Dongen, Eindhoven University of Technology
Claudio Di Ciccio, Vienna University of Economics and Business
David Knuplesch, alphaQuest GmbH
Dirk Fahland, Eindhoven University of Technology
Fabrizio Magni, University of Tartu
Hagen Völzer, IBM Research - Zurich
Hajo Reijers, Utrecht University
Han van der Aa, Humboldt University of Berlin
Henrik Leopold, Kuehne Logistics University
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Marcello La Rosa, The University of Melbourne
Massimiliano de Leoni, University of Padua
Maurizio Proietti, CNR-IASI
Minseok Song, Pohang University of Science and Technology
Seppe vanden Broucke, Katholieke Universiteit Leuven
Stefan Schoenig, University of Bayreuth
Wil van der Aalst, RWTH Aachen University

Inquiries regarding PQ 2019 can be addressed to workshop@processquerying.com