

Research Output

Peer-reviewed conference proceedings

Conference proceedings

F. Arcelli Fontana, V. Ferme, A. Marino, B. Walter, and P. Martenka. **Investigating the Impact of Code Smells on System's Quality: An Empirical Study on Systems of Different Application Domains**. In Proc. of the 29th IEEE International Conference on Software Maintenance, ICSM '13, **2013**. [[Proceedings](#)]

C. Pautasso, V. Ferme, D. Roller, F. Leymann, and M. Skouradaki. **Towards workflow benchmarking: Open research challenges**. In Proc. of the 16th conference on Database Systems for Business, Technology, and Web, BTW 2015, **2015**. [[Proceedings](#)] [[Slides](#)]

M. Skouradaki, D. H. Roller, L. Frank, V. Ferme, and C. Pautasso. **On the Road to Benchmarking BPMN 2.0 Workflow Engines**. In Proc. of the 6th ACM/SPEC International Conference on Performance Engineering, ICPE '15, **2015**. [[Proceedings](#)] [[Slides](#)]

M. Skouradaki, V. Ferme, F. Leymann, C. Pautasso, and D. H. Roller. **“BPELanon”: Protect business processes on the cloud**. In Proc. of the 5th International Conference on Cloud Computing and Service Science, CLOSER 2015, **2015**. [[Proceedings](#)]

V. Ferme, A. Ivanchikj, and C. Pautasso. **A Framework for Benchmarking BPMN 2.0 Workflow Management Systems**. In Proc. of the 13th International Conference on Business Process Management, BPM '15, **2015**. [[Proceedings](#)] [[Slides](#)]

V. Ferme, A. Ivanchikj, C. Pautasso, M. Skouradaki, and F. Leymann. **A Container-centric Methodology for Benchmarking Workflow Management Systems**. In Proc. of the 6th International Conference on Cloud Computing and Service Science, CLOSER 2016, **2016**. [[Proceedings](#)] [[Slides](#)]

M. Skouradaki, V. Ferme, C. Pautasso, F. Leymann, and A. van Hoorn. **Micro-Benchmarking BPMN 2.0 Workflow Management Systems with Workflow Patterns**. In Proc. of the 28th International Conference on Advanced Information Systems Engineering, CAiSE '16, **2016**. [[Proceedings](#)] [[Slides](#)]

C. Jürgen, V. Ferme, and H.C. Gall. **Using Docker Containers to Improve Reproducibility in Software and Web Engineering Research**. In Proc. of the 16th International Conference on Web Engineering, **2016**. [[Proceedings](#)] [[Slides](#)]

V. Ferme, A. Ivanchikj, and C. Pautasso. **Estimating the Cost for Executing Business Processes in the Cloud**. In Proc. of the 14th International Conference on Business Process Management, BPM Forum '16, **2016**. [[Proceedings](#)] [[Slides](#)]

V. Ferme, M. Skouradaki, A. Ivanchikj, C. Pautasso, and F. Leymann. **Performance Comparison Between BPMN 2.0 Workflow Management Systems Versions**. In Proc. of the 18th International Conference on Enterprise, Business-Process and Information Systems Modeling, BPMDS '17, **2017**. [[Proceedings](#)] [[Slides](#)]

A. Ivanchikj, V. Ferme, and C. Pautasso. **On the Performance Overhead of BPMN Modeling Practices**. In Proc. of the 15th International Conference on Business Process Management, BPM '17, **September 2017**. [[Proceedings](#)] [[Slides](#)]

S. Harrer, J. Lenhard, O. Kopp, V. Ferme and C. Pautasso. **A Pattern Language for Workflow Engine Conformance and Performance Benchmarking**. In Proc. of the 22nd European Conference on Pattern Languages of Programs, EuroPLoP '17, **2017**. [Accepted]

Workshop proceedings

F. Arcelli Fontana, V. Ferme, and S. Spinelli. **Investigating the Impact of Code Smells Debt on Quality Code Evaluation**. In Proc. of the 3rd International Workshop on Managing Technical Debt, MTD '12, **2012**. [[Proceedings](#)] [[Slides](#)]

V. Ferme, A. Marino, and F. Arcelli Fontana. **Is it a Real Code Smell to be Removed or not?**. In Proc. of the International Workshop on Refactoring & Testing, RefTest '13, **2013**. [[Proceedings](#)]

M. Skouradaki, D. H. Roller, F. Leymann, V. Ferme, and C. Pautasso. **Technical open challenges on benchmarking workflow management systems**. In Proc. of the 2014 Symposium on Software Performance, SSP 2014, **2014**. [[Proceedings](#)]

F. Arcelli Fontana, V. Ferme, M. Zanoni, and A. Yamashita. **Automatic metric thresholds derivation for code smell detection**. In Proc. of the 6th International Workshop on Emerging Trends in Software Metrics, WETSoM '15, **2015**. [[Proceedings](#)]

F. Arcelli Fontana, V. Ferme, and M. Zanoni. **Toward assessing software architecture quality by exploiting code smell relations**. In Proc. of the 2nd International Workshop on Software Architecture and Metrics, SAM '15, **2015**.

[\[Proceedings\]](#)

F. Arcelli Fontana, V. Ferme, M. Zanoni, and R. Roveda. **Towards a prioritisation of code debt: A code smell Intensity Index**. In Proc. of the 7th International Workshop on Managing Technical Debt, MTD '15, **2015**. [\[Proceedings\]](#)

V. Ferme, and C. Pautasso. **Towards Holistic Continuous Software Performance Assessment**. In Proc. of the 3rd International Workshop on Quality Aware DevOps, QUDOS '17, **2017**. [\[Proceedings\]](#) [\[Slides\]](#)

Contributions to international conferences

Demos

M. Palmonari, A. Rula, R. Porrini, A. Maurino, B. Spahiu, and V. Ferme. **ASBTAT: Linked Data Summaries with ABstraction and STATistics**. In Proc. of the 12th Extended Semantic Web Conference [Demonstrations Track], ESWC '15, **2015**. [\[Proceedings\]](#)

A. Ivanchikj, V. Ferme, and C. Pautasso. **BPMeter: Web Service and Application for Static Analysis of BPMN 2.0 Collections**. In Proc. of the 13th International Conference on Business Process Management [Demo], BPM '15, **2015**. [\[Proceedings\]](#) [\[Screencast\]](#)

V. Ferme, and C. Pautasso. **Integrating Faban with Docker for Performance Benchmarking**. In Proc. of the 7th ACM/SPEC International Conference on Performance Engineering, ICPE '16, **2016**. [\[Proceedings\]](#)

Posters

F. Arcelli Fontana, V. Ferme, and M. Zanoni. **Poster: Filtering code smells detection results**. In Proc. of the 37th International Conference on Software Engineering, ICSE '15, **2015**. [\[Proceedings\]](#)

V. Ferme, J. Lenhard, S. Harrer, M. Geiger, and C. Pautasso. **Workflow Management Systems Benchmarking: Unfulfilled Expectations and Lessons Learned**. In Proc. of the 39th International Conference on Software Engineering, ICSE '17, **2017**. [\[Proceedings\]](#) [\[Poster\]](#)

Outreach activities

Invited Speaker

Title: Towards a Benchmark for BPMN Engines [\[Slides\]](#)

Authors: V. Ferme

03.11.2015 - TIM Solutions (Company), Munich, Germany

Title: Towards a Benchmark for BPMN Engines [[Slides](#)]

Authors: V. Ferme, and C. Pautasso

04.11.2015 - W-JAX Conference, Munich, Germany

Title: Towards a Benchmark for BPMN Engines [[Slides](#)]

Author: V. Ferme

06.09.2016 - 1st International Workshop on Performance and Conformance of Workflow Engines

Title: BenchFlow: A Platform for End-to-end Automation of Performance Testing and Analysis [[Slides](#)]

Author: V. Ferme

12.05.2017 - SPEC RG DevOps Meeting

Tutorials

Title: Using Docker Containers to Improve Reproducibility in Software and Web Engineering [[Slides](#)]

Authors: Jürgen Cito, V. Ferme, and Harald C. Gall

Speakers: Jürgen Cito, and V. Ferme

06.06.2016 - 16th International Conference on Web Engineering (ICWE '16)

Title: Using Docker Containers to Improve Reproducibility in Software and Web Engineering [[Slides](#)]

Authors: Jürgen Cito, V. Ferme, and Harald C. Gall

Speaker: V. Ferme

25.10.2016 - Seminar at University of Milano-Bicocca

Other artefacts with documented use

BenchFlow Framework - <https://github.com/benchflow/benchflow>

BPMeter - <http://benchflow.inf.usi.ch/bpmeter> [[Screenshot](#)]