



# CALL FOR PAPER QUDOS 2017

3rd International Workshop on Quality-Aware DevOps

Co-located with the 8th ACM/SPEC International Conference on Performance Engineering  
(ICPE 2017)

**L'AQUILA, ITALY**  
**APRIL 27, 2017**

<http://qudos2017.fortiss.org/>

## IMPORTANT DATES

PAPER SUBMISSION DEADLINE:	Jan 10, 2017	CAMERA-READY DEADLINE:	Feb 16, 2017
PAPER NOTIFICATION:	Feb 10, 2017	WORKSHOP DATE:	April 27, 2017

## SCOPE AND TOPICS

DevOps has emerged in recent years as a set of principles and practices for smoothing out the gap between development and operations, thus enabling faster release cycles for complex IT services. Common tools and methods used in DevOps include infrastructure as code, continuous deployment, automated testing, continuous integration, and new architectural styles such as microservices.

As of today, software engineering research has mainly explored these problems from a functional perspective, trying to increase the benefits and generality of these methods for the end users. However, this has left behind the definition of methods and tools for DevOps to assess, predict, and verify quality dimensions.

The QUDOS workshop focuses on the problem of how to best define and integrate quality assurance methods and tools in DevOps. Quality covers a broadly-defined set of dimensions including functional correctness, performance, reliability, safety, survivability, and cost of ownership, among others. To answer this question, the QUDOS workshop wants to bring together experts from academia and industry working in areas such as quality assurance, testing, performance engineering, agile software engineering, and model-based development. The goal is to identify and disseminate novel quality-aware approaches to DevOps.

### Topics of interest include, but are not limited to:

- **Foundations of quality assurance in DevOps:**  
Methodologies; integration with lifecycle management; automated tool chains; architecture patterns; etc.
- **Architectural issues in DevOps:**  
Scalability and capacity planning; scale-out architectures; cloud-native application design; microservice-based architectures
- **Quality assurance in the development phase:**  
Software models and requirements in early software development phases; functional and non-functional testing; languages, annotations and profiles for quality assurance; quality analysis, verification and prediction; optimization-based architecture design; etc.
- **Quality assurance during operation:**  
Application performance monitoring; model-driven performance measurement and benchmarking; feedback-based quality assurance; capacity planning and forecasting; architectural improvements; performance anti-pattern detection; traceability and versioning; trace and log analysis; software regression and testing; performance monitoring and analytics; etc.
- **Continuous deployment and live experimentation:**  
CI and CD in DevOps; canary releases and partial rollouts; A/B testing; performance and scalability testing via shadow launches
- **Applications of DevOps:**  
Case Studies in cloud computing, Big Data, and IoT; standardization and interoperability; novel application domains, etc.
- All other topics related to quality in DevOps and agile service delivery models

For more details, please visit: <http://qudos2017.fortiss.org/>

## ORGANIZING COMMITTEE

### PROGRAM COMMITTEE CHAIRS

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Philipp Leitner, University of Zurich, Switzerland

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### SUBMISSION GUIDELINES

Authors are invited to submit original, unpublished papers that are not being considered in another forum. We solicit full papers (max 6 pages) and short tool papers (max 2 pages). All submissions must conform to the ACM conference format. Each full paper submission will be reviewed by at least three members of the program committee.

Papers should be submitted via EasyChair at:  
<https://easychair.org/conferences/?conf=qudos2017>

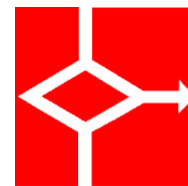
At least one author of each accepted paper is required to attend the workshop and present the paper. Presented papers will be published by ACM and included in the ACM Digital Library.

### ORGANIZATION AND SUPPORT

QUDOS 2017 is organized and technically sponsored by the Research Group (RG) and the RG DevOps Performance Working Group of the Standard Performance Evaluation Corporation (SPEC RG, <http://research.spec.org>), and by the consortium of the EU project DICE (<http://dice-h2020.eu>).

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## SPONSORS



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