



8th ACM/SPEC International Conference on Performance Engineering  
L'Aquila, Italy, April 27, 2017

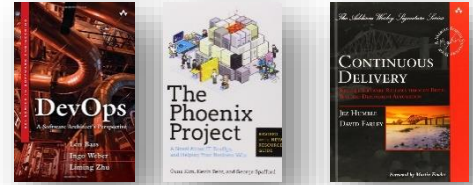
# 3rd International Workshop on Quality-aware DevOps (QUDOS 2017)



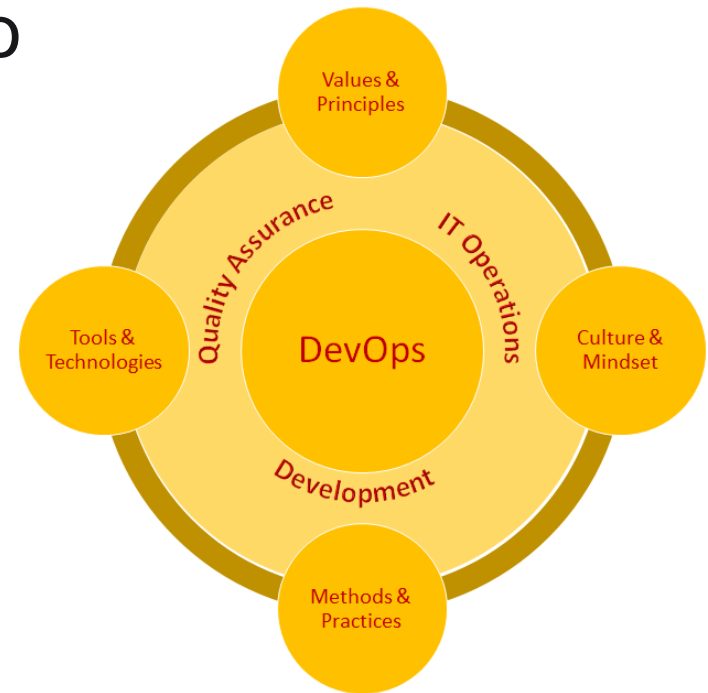
**Danilo Ardagna**, Politecnico di Milano, Italy  
**Giuliano Casale**, Imperial College London, UK  
**Elisabetta Di Nitto**, Politecnico di Milano, Italy

**Andre van Hoorn**, University of Stuttgart, Germany  
**Philipp Leitner**, University of Zurich, Switzerland  
**Felix Willnecker**, fortiss GmbH, Germany

# What is DevOps?



- DevOps is “A set of practices and tools to reduce the time to commit a change to production, while ensuring high-quality.” (*Bass et al.*’15)
- DevOps tackles:
  - Fast-changing requirements
  - Lack of agility in operations
  - Quality issues during delivery



**QUDOS 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 costs.**

**Topics of interest** (not limited to, as detailed in the CfP)

- Foundations of quality assurance in DevOps
- Architectural issues in DevOps
- Quality assurance in the development phase
- Quality assurance during operation
- Continuous deployment and live experimentation
- Applications of DevOps

# QUDOS Workshop Series

A brief (but intense!) history:

- 1<sup>st</sup> edition – 2015: Bergamo, Italy (@ESEC/FSE)
- 2<sup>nd</sup> edition – 2016: Saarbrücken, Germany (@ISSTA)

- **3<sup>rd</sup> edition – 2017: L'Aquila, Italy (@ICPE)**

– First time with “explicit PC chairs”

**Thanks to Elisabetta di Nitto and Philipp Leitner!**

- ?4<sup>th</sup> edition – 2018: Berlin, Germany (@ICPE)

# QUDOS 2017 Organizers

- SPEC RG DevOps Performance WG ([research.spec.org](http://research.spec.org))
- European project DICE ([www.dice-h2020.eu](http://www.dice-h2020.eu))



In technical cooperation with:

- DFG Special Priority Programme “Design for Future”
- IFIP Working Group on Service Oriented Systems
- Associazione Italiana per l'Informatica e il Calcolo Automatico Automatico (AICA)



AICA

# Welcome to the QUDOS'17 Programme

**Elisabetta di Nitto**

Politecnico di Milano

**Philipp Leitner**

University of Zurich, Switzerland



Design For  
**FUTURE**

**DFG**  
DFG Priority Programme 1593  
Design For Future - Managed Software Evolution



# Submissions

- 10 full submissions
- 4 tool demo submissions
- 3 - 4 reviews per paper

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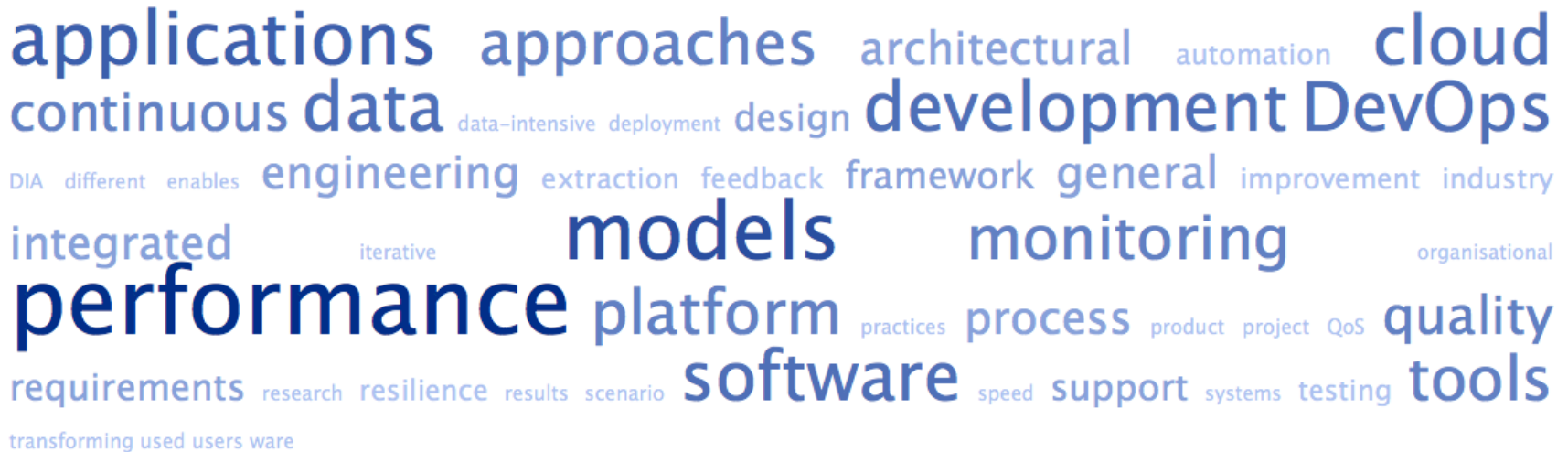
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A word cloud of terms related to software engineering and DevOps. The most prominent words are 'performance', 'models', 'development', 'DevOps', 'cloud', 'software', 'monitoring', 'platform', 'process', 'quality', and 'tools'. Other visible words include 'applications', 'approaches', 'architectural', 'automation', 'continuous data', 'data-intensive', 'deployment', 'design', 'framework', 'general', 'improvement', 'industry', 'engineering', 'extraction', 'feedback', 'iterative', 'integrated', 'organizational', 'practices', 'product', 'project', 'QoS', 'requirements', 'research', 'resilience', 'results', 'scenario', 'speed', 'support', 'systems', 'testing', 'transforming', 'used', 'users', and 'ware'.

applications approaches architectural automation cloud  
continuous data data-intensive deployment design development DevOps  
DIA different enables engineering extraction feedback framework general improvement industry  
integrated iterative models monitoring organisational  
performance platform practices process product project QoS quality  
requirements research resilience results scenario software speed support systems testing tools  
transforming used users ware

## PROGRAM COMMITTEE

Varsha Apte, IIT Bombay, India

Alberto Avritzer, Sonatype Inc., USA

Cor-Paul Bezemer, Queen's University, Canada

Andreas Brunnert, RETIT, Germany

Lubomír Bulej, Charles University Prague, CZ

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Asser Tantawi, IBM Research, USA

Catia Trubiani, Gran Sasso Science Institute, Italy

Ingo Weber, NICTA, Australia

Erik Wilde, CA API Academy, USA

# Programme Committee

# Keynotes

## Industrial Keynote

Francesco Chicchiriccò  
(TIRASA)

*“DevOps Practices and Tools of a Small Company in Love with Open Source”*

## Academic Keynote

Antinisca Di Marco  
(L'Università degli Studi dell'Aquila)

*“DevOps and WSN App: a Bio-Inspired Paradigm”*

# Programme at a Glance

## Morning

09:15 - 10:15

Industrial Keynote

10:15 - 10:45

Coffee Break

10:45 - 11:45

Technical Session I - CI, CD, and

DevOps

11:45 - 12:30

Technical Session II - Monitoring

## Afternoon

14:00 - 15:00

Academic Keynote

15:00 - 15:45

Technical Session III - Performance

Engineering

15:45 - 16:15

Coffee Break

16:15 - 17:00

Tool Demo Session

17:00 - 17:30

Wrap-Up Discussion and Closing

## Evening

19:30 – Open End

Dinner (self-paid)

# Have Fun at QUDOS'17!



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