



## CALL FOR PAPERS

[The 7<sup>th</sup> International Workshop on Reliable Engineering Computing \(REC2016\)](#)  
[June 15-17, 2016, Ruhr University Bochum | Germany](#)

### Deadlines:

**December 15, 2015:** one page abstract submission

**January 15, 2016:** notification of acceptance

**March 15, 2016:** paper submission

### Instructions for abstract submission:

Please submit both the **original LaTeX / Word file AND the associated PDF** via email to [rec2016@sd.rub.de](mailto:rec2016@sd.rub.de): with the subject line "REC2016 abstract submission". Abstracts are **limited strictly to ONE page**.

### Abstract Templates

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[REC2016](#) is focusing on "Computing with Polymorphic Uncertain Data". The international workshop will help to bring together different uncertainty quantification strategies and computational approaches taking polymorphic uncertain data into account. Polymorphic uncertainty modelling combines stochastic and non-stochastic approaches to quantify aleatory and epistemic uncertainties. Several simulation techniques will be discussed to compute and predict the reliability of engineering structures and systems. Researchers from academic institutions and industry are invited to contribute and to join in the discussions on needs and developments in the field.

This conference is unique in combining computer science, mathematics, and engineering analysis and design to discuss the reliability of engineering computations, providing a common forum by which to continue cross-disciplinary advisements in the field.

Submitted papers will be published in the conference proceedings and also will be available on-line (Open Access) from the conference web site. After the conference, selected papers will be published in a special issue of a selected journal. The papers will go through the normal refereeing process.

**Topics include but are not limited to:**

- uncertainty quantification
- reliability analysis
- risk analysis, hazard analysis, risk and hazard mitigation
- robust design, reliability-based design, performance-based design
- system and parameter identification
- damage detection and structural health monitoring
- optimization, steering and control under uncertainty
- inverse problems and cluster methods
- model reduction, surrogate models

**Herein, practical applications and practical challenges may concern, e.g.:**

- structures
- systems
- processes
- algorithms

**Methods and theories may include, e.g.:**

- interval
- statistics and probability theory
- stochastic approaches
- Bayesian theory
- fuzzy set theory
- imprecise probabilities
- evidence theory
- p-box approach
- fuzzy probability theory
- interval analysis
- fuzzy analysis
- convex modeling
- information gap theory

Contributions are invited with emphasis on both theory and applications.

**Instructions for paper submission:**

**All papers must be written in English using the templates provided below.** Please submit both the *original LaTeX / Word file AND the associated PDF* via email to [rec2016@sd.rub.de](mailto:rec2016@sd.rub.de) with the subject line "REC2016 paper submission". Papers are *limited strictly to 20 pages*.

**Paper Templates:**

[\[LaTeX Template\]](#)

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