

## informatik-Kolloquium

Der Fachbereich Informatik der Johannes Kepler Universität Linz<sup>1</sup> lädt in Zusammenarbeit mit der Österreichischen Gesellschaft für Informatik (ÖGI) zu folgendem Vortrag ein:

### **Software Performance Antipatterns to reduce Traceability Uncertainty**



**Catia Trubiani**  
Post-doc Researcher  
Gran Sasso Science Institute (GSSI)  
L'Aquila, Italy

**Thursday, January 21th 2016, 14:00 – 15:00**  
**JKU Linz, SCP3 218, Science Park 3**

#### **Abstract:**

The problem of interpreting the results of performance analysis is quite critical in the software performance domain: mean values, variances, and probability distributions are hard to interpret for providing feedback to software architects. Support to the interpretation of such results that helps to fill the gap between numbers and architectural alternatives is still lacking. This talk is aimed at illustrating PANDA (Performance Antipatterns aNd FeeDback in software Architectures), a framework for addressing the results interpretation and feedback generation problem by means of performance antipatterns, that are recurring solutions to bad practices in software development. Such antipatterns can play a key role in understanding the traceability between architectural model elements and performance analysis results, since they can be used to reduce the uncertainty while bridging these two domains.

#### **Short Bio:**

Catia Trubiani is a Post-doctoral Researcher at the Gran Sasso Science Institute (GSSI), L'Aquila, Italy, since April 2014. She received the PhD in Computer Science at the University of L'Aquila with a dissertation on the automated generation of architectural feedback from software performance analysis results. During her PhD studies she visited the Imperial College of London in UK and the Karlsruhe Institute of Technology in Germany. Her main research interests include the quantitative modelling and analysis of interacting heterogeneous distributed systems. She is especially interested in the model-driven QoS analysis of software architectures, model-driven refactoring by means of software performance antipatterns, and trade-off QoS analysis and optimization.

*Institute for Software Systems Engineering, E-Mail: [isse@jku.at](mailto:isse@jku.at)*

<sup>1</sup> Der Fachbereich (<http://informatik.jku.at>) besteht aus folgenden Instituten:  
Application Oriented Knowledge Processing (FAW), Bioinformatics, Computational Perception, Computer Architecture, Applied Systems Research and Statistics, Computer Graphics, Formal Models and Verification, Networks and Security, Integrated Circuits, Pervasive Computing, Software Systems Engineering, System Software, Telecooperation, Signal Processing