



**Ph.D. School in Electrical and Electronic  
Engineering and Computer Science**

**International Doctoral School on  
Advanced Topics in Electrical and Electronic  
Engineering and Informatics**

## **The challenges of Multi-Clouds**

***Professor Dana Petcu***  
**West University of Timisoara, Romania**

19 December 2013, h 14.30  
Room A2  
Polo Didattico Ingegneria  
Università degli Studi di Pavia – Via Ferrata 5 - Pavia

**Abstract:** Using resources and services from multiple Clouds is a natural evolution from in-silo Clouds. Being able to move, at design or at run-time, applications from one Cloud to another can reduce the risk of Cloud adoption. However, the consumers of Cloud resources are complaining about the non-portability of Cloud applications and the vendor lock-in. The role of the third parties as mediators between the consumers and providers is starting to be delineated. They build ad-hoc grouping of Cloud resources to satisfy application requirements. In this context, the talk will be oriented towards: the taxonomy of Multi-Clouds, overview of the available mediators for Multi-Clouds, gaps between requirements and offers. Approaches and achievements of recent research projects will be discussed, such as, MODAClouds: Model-driven approach for design and execution of applications on multiple Clouds, mOSAIC: Open-source API and platform for multiple Clouds, SPECS: Secure provisioning of cloud services based on SLA management, AMICAS: Automated management in Cloud and Sky computing environments, HOST: HPC as a service.

**Biography:** Dana Petcu is Professor at Computer Science Department, and president of scientific council of West University of Timisoara, manager of the Romanian largest HPC center, and CEO of the research Institute e-Austria Timisoara (Romania). Her interest in distributed and parallel computing is reflected in more than hundred papers about Cloud, Grid, or HPC computing. She is chief editor of the open-access journal Scalable Computing - Practice and Experience, and has received an international award for women in science. She was and is involved in several projects funded by European Commission as well as in various European research policy forums.

**Organizer**

Prof. Luisa Massari

**Ph.D. Coordinator**

Prof. M. Calzarossa