# SCIENCESPRINGDAY



**DEPARTAMENTO DE INFORMÁTICA** 

## **SoftwarE MOdeling and VAlidation**

SOFTWARE SYSTEMS / SE.MOVA





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He holds a PhD from Lancaster University, UK. Projects and more than 150 publications on Requirements Engineering, Model-Driven Development, Software Product Lines and Aspect-Oriented Modeling

#### **Objectives**

The main objective of this project-team is to advance the state of the art in several Software Engineering (SE) research areas including, but not restricted to: requirements engineering, model-driven engineering, process modeling, language engineering, software modularity, software evolution, software reuse, software product lines engineering, and experimental SE.

We research new SE techniques to deal with the construction and evolution of complex software systems, which are becoming pervasive and critical to today's society, due to the multitude and diversity of resources they have to manage, in a changing world

#### **Methodology**

Investigating largely used techniques in Model-Driven Development (like Model Transformations, Metamodeling) to help develop Requirements Engineering, Software Architectures, AOSD, and SPL approaches and tools Some highlights:

- Organization of conferences (e.g. MODELS, RE, AOSD, ICSE, QUATIC, InForum), workshops (MoDRE, CMA) and the DSM-TP Summer School.
- ii) Networking with SE groups from UK, France, Brazil, Spain, Argentina
- iii) Projects: AMPLE (EU), SOFTAS and BATICS (FCT)
- iv) PC and PB member of major conferences (RE, CAiSE, MoDELS, ER)
- v) AWARD: The Most Influential Paper @ AOSD'13 Conference

### **Expected Results**

Our expected future contributions include models, techniques, qualitative assessments and tools, to serve the needs of domain experts, software project managers, requirements engineers, software architects, programmers, users and those who support software operation and evolution.

More specifically, our research pursuits to achieve, for example, advanced approaches in Model-Driven Development for Requirements Engineering, Software Architecture and Software Product Lines and quality assessment of those approaches.

Funding:









