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## EUROSOI "Who is Who" Guide

### Name of the organisation

Organization Legal name:	University of Salamanca
Organization short name:	USAL
Internet homepage:	www.usal.es

### Contact person

Name:	Martín Martínez	Title:	Dr
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### Other Senior Researchers

Dr. Raúl Rengel      [raulr@usal.es](mailto:raulr@usal.es)

### Experience and expertise fields

The **Silicon Electronics Group** at USAL has a 8 year experience in the field of modeling and simulation of semiconductor materials and electronic devices, mainly using Monte Carlo techniques. In particular, Silicon, SiGe alloys and strained Si, one-port (Schottky, p-n Si and Si/Ge heterostructure diodes) and two-port (BJT and HBTs, MOSFETs and SOIs) electronic devices have been the subject of investigation. The group is mainly specialized in the analysis of noise in semiconductor devices, including the modelling of experimental submicron SOI transistors.

### Facilities and Equipment

In the USAL we have all the hardware and software ingredients needed for the development of simulation tools of high-frequency noise in real devices:

- A 30-way cluster with PIV CPUs at 2.4 GHz,
- Two 2-way workstations with Alpha processors at 833 MHz

In-house Monte Carlo code for materials, 1D, and 2D Silicon bipolar and FET simulation.

### Three last international research projects

METAMOS (Ref. 016677) Metallic Source / Drain Architecture for Advanced MOS Technology: European Project