

6th EUROSIM Congress on Modelling and Simulation
September 9-13, 2007
Ljubljana, Slovenia

<http://www.eurosim2007.org>



Announcement of a special session:

Simulations, modelling and optimization of VLSI circuits

The intention of the organizer is to attract papers related to modelling, simulations and optimization of VLSI IC's, to highlight current problems, state of the art and research directions in the area of VLSI SoS design.

With advent of modern microelectronic and nanoelectronic VLSI technologies, the number of transistors available has increased dramatically. Therefore modelling, simulation and optimisation become very computationally intensive time-consuming and very important. The complexity became so big that using available tools does not allow us to fully exploit available technologies therefore, improved tools are necessary. Besides complexity, the elements have worse characteristics, the models are poor and even more complex compared to previous generations. In addition, parasitic capacitances, wiring resistances and capacitances, substrate effects, cross talk etc. are becoming more and more pronounced. VLSI circuits are in fact systems on silicon that include digital (embedded software/hardware), analogue, mixed-signal, RF and even different kind of sensors on a single chip. Usually all these elements are operating under different conditions and/or frequencies and some of them utilise non-electrical effects; they all need appropriate tools for modelling, simulations and optimisation.

All topics listed (but not limited) related to simulation, modelling, optimisation and description of VLSI circuits are welcome:

- Improved/enhanced circuit simulation methods
- Modelling and speed-ups of circuit simulation of large VLSI
- Behaviour modelling and simulation of large VLSI
- Stochastic modelling and simulation of mixed-signal circuits
- modelling, languages and simulations of electric and non-electric effects
- Optimisation of analogue/mixed-signal circuits
- Multi-rate VLSI modelling and simulations
- Power aware and thermal simulation and modelling of VLSI
- Cross-talk modelling and simulations
- Efficient Yield simulation and analysis
- Efficient Monte-Carlo simulations
- Modelling and simulations of nanoelectronic devices and circuits

Session organizer:

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Deadlines:

Announcement of a contribution (to facilitate session organization):

15 March 2007 (by E-mail to the session organizer)

Submission of 2 page extended abstract or daft paper:

9 April 2007 (by E-mail to the session organizer)

Acceptance notification after paper review:

30 May 2007

Full paper (camera ready) due to:

30 June 2007 (to the conference server with copy to the session organizer)

See also instructions: <http://www.eurosim2007.org/Instructions.html>

Drago Strle