

SCEE 2018 – The 12th International Conference on Scientific Computing in Electrical Engineering

September 23-27, 2018 – Taormina, Sicily, Italy

Program at a glance

	Sunday 23	Monday 24	Tuesday 25	Wednesday 26	Thursday 27
09:00 – 09:15		Opening	Section 5	Section 7	Section 10
09:15 – 09:20			<ol style="list-style-type: none"> O. Morandi, <i>Description of the trajectories of quantum particles by a Quantum Lagrangian approach</i> K.V. Aadithya, E.R. Keiter, T. Mei, <i>Predictor/Corrector Newton-Raphson (PCNR): A Simple, Flexible, Scalable, Modular, and Consistent Replacement for Limiting in Circuit Simulation</i> K. Bittner, H.G. Brachtendorf, W. Schoenmaker, <i>LinzFrame – A Modular Mixed-Level Simulator with Emphasis on Radio Frequency Circuits</i> 	<ol style="list-style-type: none"> M. Saggio, <i>Title tba</i> T. Biondi, <i>Data Center Power</i> A. Blaszczyk, T. Christen, H.K. Meyer, M. Schüller, <i>Surface Charging Formulations for Engineering Applications. Validation by Experiments and Transient Models</i> 	<ol style="list-style-type: none"> B. E. Abali, <i>Modeling mechanochemistry in Li-ion batteries</i> I. Deretzis, A. La Magna, <i>Multiscale atomistic modeling for materials science applications</i> A. Bermúdez, D. Gómez1, D. González-Peñas, <i>Thermo-electrical analysis of indirect resistance heating furnaces combining numerical simulation and lumped models</i>
09:20 – 10:40		Section 1			
		<ol style="list-style-type: none"> M. Auf der Maur, <i>Current developments in device simulation: degeneracy, arbitrary density of states and multi-particle drift-diffusion</i> R. Pinnau, <i>Semiconductor Optimization, Model Hierarchies & Asymptotic Analysis</i> M. Coco, V. Romano, <i>Charge and phonon transport in suspended monolayer graphene</i> 			
10:40 – 11:00		Coffee break	Coffee break	Coffee break	Coffee break
11:00 – 11:20			Section 6	Section 8	Section 11
11:20 – 12:40		Section 2	<ol style="list-style-type: none"> G. Nastasi, V. Romano, <i>Simulation of double gate graphene field effect transistors</i> G. Mascali, V. Romano, <i>A hydrodynamic model for 2D-3D electron transport in silicon devices</i> J. Tant, J. Driesen, <i>Analysis and Numerical Solution of Piecewise Smooth Differential Algebraic Equations for Power Electronic Circuit Simulation</i> P.C. Africa, C. de Falco, D. Natali, <i>Scalable Adaptive Numerical Simulation for Organic Thin Film Transistors</i> 	<ol style="list-style-type: none"> P. Gangl, S. Amstutz, U. Langer, <i>Topology and Shape Optimization of Electrical Machines</i> J. Zimmermann, U. van Rienen, <i>Electromagnetic stimulation chambers for cartilage regeneration</i> K. Butenko, A. Böhme, U. van Rienen, <i>Open Source Simulation Platform for Deep Brain Stimulation</i> 	<ol style="list-style-type: none"> S. Börm, <i>GCA-H^2 matrix compression for electrostatic simulations</i> S. Hu, C. Yuan, T. Bechtold, <i>Quasi-Schur Transformation for the Stable Compact Modeling of Piezoelectric Energy Harvester Devices</i> A.K. Tyagi, X. Jonsson, T.G.J. Beelen, W.H.A. Schilders, <i>An Unbiased Hybrid Importance Sampling Monte Carlo Approach for Yield estimation in Electronic Circuit Design</i> Herbert Egger, Bogdan Radu, <i>A mass-lumped mixed finite element method for Maxwell's equations</i>
12:40 – 13:00		Lunch	Lunch	Lunch	Closing
13:00 – 14:40			Social tour	Section 9	
14:40 – 15:00				<ol style="list-style-type: none"> J. Gopalakrishnan, <i>Techniques for modeling fiber laser amplifiers</i> N. Marsic, H. De Gersem, <i>Optimized Schwarz methods for Helmholtz problems in a closed domain</i> P. Gangl, U. Langer, A. Mantzaflar, R. Schneckenleitner, <i>Isogeometric Simulation and Shape Optimization with Applications to Electrical Machines</i> 	
15:00 – 16:20		Section 3		Coffee break	
		<ol style="list-style-type: none"> S. Grundel, <i>Simulation and Model Order Reduction of Power Systems</i> O. Jadhav, E. Rudnyi, T. Bechtold, <i>Load Snapshot Based Nonlinear-Input Model Order Reduction of a Thermal Human Tissue Model</i> R. Pulch, <i>Frequency-domain integrals for stability preservation in model order reduction</i> R. Barbulescu, D. Ioan, G. Ciuprina, A.S. Lup, M. Popescu, <i>Reduced Order Models for the Simulation of the Saltatory Conduction</i> 		Poster shot gun presentation	
16:20 – 16:40					
16:40 – 17:00					
17:00 – 17:20		Coffee break			
17:20 – 18:00		Section 4		Poster session	
18:00 – 18:30		<ol style="list-style-type: none"> O. Muscato, <i>Direct Simulation Monte Carlo of the Wigner transport equation</i> P. Putek, E.J.W. ter Maten, M. Günther, <i>Shape optimization of a permanent magnet synchronous machine under probabilistic constraints</i> G. Aiello, S. Alfonzetti, S.A. Rizzo, N. Salerno, <i>Shape optimization of an induction heating device</i> 			
18:30 – 18:40	Registration				
18:40 – 19:00					
19:00 – 19:30					
19:30 – 20:00	Welcome cocktail				
20:00 – 20:30			Social dinner		
20:30					