

2001 IEEE International Workshop on Behavioral Modeling and Simulation

BMAS 2001

Advance Program

FountainGrove Inn
Santa Rosa, California
October 10-12, 2001

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THE INSTITUTE OF ELECTRICAL
& ELECTRONICS ENGINEERS, INC.

**Mentor
Graphics**



Welcoming Reception – Wednesday, October 10

7:00 PM Demos by Mentor Graphics and Cadence on Analog/Mixed-Signal Solutions

Opening Session – Thursday, October 11

9:00 AM Workshop Opening
Alan Mantooth, Georges Gielen

Keynote Speaker

9:15 AM A Perspective on Behavioral Modeling
Ian Getreu, Cadence Design Systems

10:15 AM Break – Sponsored by Cadence Design Systems

Session 1 - RF and Mixed-Signal Behavioral Modeling

10:30 AM A VHDL-AMS Library of RF Blocks Models
Noëlle Milet-Lewis, Guillaume Monnerie, AhMmed Fakhfakh, Didier Geoffroy, IXL Laboratory, France

10:55 AM Behavioural Modeling of Microwave Oscillating Amplifiers
Enrico Calandra, Roberto Ruggirello, Palermo University, Italy

11:20 AM Simulation and Verification of a Mixed-Signal Programmable System on a Chip
Monte Mar, Bert Sullam, Cypress MicroSystems, U.S.A.

11:45 AM Experience of Behavioural Modeling in the Mixed-Signal ASIC Design Process - A Case Study
Peter Wilson, Paul Chapman, Neil Ross, Andrew Brown, University of Southampton - Avant! Corporation, United Kingdom

12:10 PM Fast Evaluation of Digital Switching Noise for Synthesis of Mixed-Signal Applications
Alex Doboli, Ranga Vemuri, State University of New York at Stony Brook, U.S.A. -University of Cincinnati, U.S.A.

12:35 PM Lunch

Session 2 - Behavioral Language Issues and Model Generation Techniques

2:00 PM An Extensible Compact Model Description Language and Compiler
Richard Booth, Agere Systems, U.S.A.

2:25 PM Requirements for Object-Oriented Systems Modeling with STEAMS
Gregory D. Peterson, Phil Wilsey, University of Tennessee, USA - University of Cincinnati, U.S.A.

2:50 PM Initialization of Mixed-Signal Systems in VHDL-AMS
Ken Ruan, Avant! Corporation, U.S.A.

3:15 PM Pole-zero Localization: A Behavioral Modeling Method
Christopher Gathercole, Alan Mantooth, University of Arkansas, U.S.A.

3:45 PM Break – Sponsored by CANDE

Discussion forum

4:10 PM Introduction on RF/MW extensions VHDL-AMS
Hal Carter, University of Cincinnati, U.S.A.

7:00 PM Workshop Dinner at Local Winery

Tutorial

9:00 AM Baseband-Equivalent Behavioral Modeling Approach for RF
 Jess Chen, Resonext, U.S.A.

10:15 AM Break – Sponsored by Mentor Graphics

Session 3 - Mixed-Technology Modeling

10:30 AM The Virtual Disk Drive - Mixed-Domain Support for Disk Electronics Over the Complete Life-Cycle
 Georg Pelz, Infineon Technologies, Germany

10:55 AM Biological Modeling Of Cellular Processes With VHDL-AMS
 Gregory D. Peterson, University of Tennessee, U.S.A.

11:20 AM Motor Modeling Based on Physical Effect Models
 Dirk Dammers, Patrice Binet, Georg Pelz, Lars Voßkämper, Dolphin Integration, Germany - Ecole Centrale de Lyon, France - Infineon Technologies, Germany

11:45 AM Mixed Signal, Multi Domain Behavioral Models of Smart-Power ICs for Design Integration in Automotive Applications
 Dieter Metzner, Juergen Schaefer, Chihao Xu, Infineon Technologies, Germany

12:10 PM Lunch

Session 4 - Multi-domain Device and Circuit Modeling

2:00 PM VHDL-AMS design of a MOST Model Including Deep Submicron and Thermal-Electronic Effects
 Christophe Lallement, François Pêcheux, Yannick Hervé, PHASE, France

2:25 PM Automatic Embedding of a Ferroelectric Capacitor Model in Eldo
 Marco Zorzi, Nicolò Speciale, Guido Masetti, University of Bologna, Italy

2:50 PM A CMOS Photodiode Model
 Wei Jean Liu, Oscal T.-C. Chen, Li-Kuo Dai and Far-Wen Jih Chung Cheng University, Chia-Yi, Taiwan - Taiwan Chung-Shan Institute of Science & Technology, Tao-Yuan, Taiwan

3:15 PM Behavioural Modeling of Operational Amplifier Faults Using a Hardware Description Language
 Peter Wilson, Yavuz Kilic, Mark Zwolinski, University of Southampton - Philips Semiconductors - University of Southampton, United Kingdom

3:40 PM Break – Sponsored by IEEE Circuits and Systems Society

Panel discussion

4:10 PM Systems Design with AMS HDLs: What's Next?

5:30 PM Workshop Closing

Registration Information

The conference will be at the FountainGrove Inn, Santa Rosa, California, USA. The hotel is in the Sonoma Valley, roughly 60 miles from both Oakland and San Francisco airports. For room reservations, call the FountainGrove Inn:

FountainGrove Inn
 101 Fountain Grove Parkway
 Santa Rosa, CA 95403
 707-578-6101
1-800-222-6101



Room rates (**held until Sept. 10**) are:

\$114 Executive King or Double Queen
 \$139 Standard King
 \$275 Corner Suite

Mention BMAS when booking a room to get the workshop rate. See also <http://www.fountaingroveinn.com>. For transportation, there is a complimentary shuttle service from the Sonoma County Airport. Call the room reservation number to book a time.

Conference Fees:

Advance Registration (by Sept. 10)	On-Site Registration
\$250 US	\$300 US

Workshop fees include the workshop dinner and luncheon. Extra tickets for the workshop dinner may be purchased on site.

Registration Procedure:

The registration form may be mailed or faxed or filled out online at <http://www.esat.kuleuven.ac.be/~bmas/>.

Mailing Address:

Prof. Alan Mantooth
 Department of Electrical Engineering
 BEC 3217
 University of Arkansas
 Fayetteville, AR 72701
 USA

FAX: (501) 575-7967 Please address the fax "Attn: Alan Mantooth"

2001 BMAS Registration Form

Name: _____

Affiliation: _____

Address: _____

E-mail Address: _____

Telephone Number: _____

Method of payment:

1. Enclosed check payable to "University of Arkansas – BMAS 2001"
2. Credit Card Number: _____

Type: VISA Mastercard Discover AMEX

Expiration Date: _____