VTS 2024 Final Program Collapse/Expand all days Monday, April 22, 2024 ▼ Collapse/Expand day's sessions 07:30 Registration & Breakfast (MU 220 Turquoise) 08:30 Plenary Session (MU 230 PIMA) Welcome by the Chairs & Awards Sule Ozev and Mehdi Tahoori, General Chairs Jennifer Dworak and Naghmeh Karimi, Program Chairs 09:00 Keynote Presentation: Grand Challenges in Design for Test and Silicon Lifecycle Management (MU 230 PIMA) Speaker: Dr. Janusz Rajski | Siemens EDA 09:45 Break (MU 220 Turquoise) 10:15 Regular Session 1: Considerations for ML Special Session 1: Radiation Testing (MU IP Session 1: Analog Testing Technologies Accelerator Reliability (MU 230 PIMA) ▼ 228 Cochise) ▼ for Digital Exploding Societies (MU 242 La Paz) ▼ Session Chair: Ilia Polian (Stuttgart) Organizer: Hugh Barnaby (ASU) Organizer: Haruo Kobayashi (Gunma University) Session Chair: Adalin Benedetto Analyzing and Mitigating Circuit Aging (Alphacore Inc) Effects in Deep Learning Accelerators Session Chair: Haruo Kobayashi (Gunma Speaker: Sanjay DAS University) Authors: Sanjay DAS, Shamik KUNDU, Total Ionizing Dose Radiation Effects -Anand MENON (University of Texas at Mechanisms and Test Structure Design Dallas), Shubha KHAREL, Yihui REN Speaker: Hugh Barnaby (ASU) Development of 13fsrms Low Jitter 1GHz (Brookhaven National Laboratory), Kanad Crystal Oscillator for ATE Reference Clock BASU (University of Texas at Dallas) Speaker: Naoki Tsukahara (Advantest) Single Event Effects - Mechanisms and Test Structure Design On the Sensitivity of Analog Artificial Speaker: Daniel Loveless (UTC) Sub-ns Testing Using SAR Time-to-Digital **Neural Network Models to Process** Converter **Variation** Speaker: Keno Sato (ROHM Radiation Hardness Assurance Testing Speaker: Yiorgos MAKRIS Semiconductor) Speaker: Gregory R Allen (JPL) Authors: Nosheen AFROZ, Ahmad Sayeed SAYEM, Georgios VOLANIS (UT Dallas), ADC Diagnosis by Exploiting LMS Digital Dzmitry MALIUK (Yale University), Haralampos STRATIGOPOULOS Speaker: Takashi Oshima (Hitachi Ltd) (Sorbonne Univ., CNRS, LIP6), Yiorgos MAKRIS (UT Dallas) Analyzing the Impact of Scheduling Policies on the Reliability of GPUs running **CNN** operations Speaker: Robert LIMAS SIERRA Authors: Robert LIMAS SIERRA, Francesco PESSIA, Juan GUERRERO, Josie RODRIGUEZ CONDIA, Matteo SONZA REORDA (Politecnico di Torino) 11:15 Regular Session 2: High Quality Test (MU Special Session 2: mm-Wave Antena Test IP Session 2: Silent Data Corruption (MU 242 La Paz) ▼ and Calibration (MU 228 Cochise) ▼ 230 PIMA)▼ Organizer: Georgios Trichopoulos (ASU) Organizer: Arani Sinha (Intel) Session Chair: Maheshwar Chandrasekar (Synopsys) Session Chair: Jennifer Kitchen (ASU) Session Chair: Adit Singh (Auburn U) **Customizing ATPG User-Defined Stresses** and Tests To Target Cell-Neighborhood-'Si'lent Data Errors - Detection and Characterization of Millimeter-wave **Bridging Defects** Reconfigurable Intelligent Surfaces Using a Resilience Speaker: Stephen TRAYNOR Near-Field Measurement Setup Speaker: Shubhada Sahasrabudhe (Intel) Authors: Stephen TRAYNOR (NXP), Speaker: Aditya Shekhawat (ASU) Saidapet RAMESH, Lawrence HERR, Addressing Silent Data Corruption Maryfe HERNANDEZ, Scott CHEN (NXP Millimeter-wave and THz Measurement Challenges Semiconductors) **Practices** Speaker: Yervant Zorian (Synopsys) Speaker: Saeed Zeinolabedinzadeh (ASU) Test Compaction Using (k,1)-Cycle Tests Speaker: Irith POMERANZ Rapid measurements of Antenna-in-Authors: Irith POMERANZ (Purdue Package (AiP) scaling from mmWave to University) Sub-THz Speaker: Christian Muresan (NI/Emerson) Scenario-based Test Content Optimization: Scan-Test vs. System-Level Test Multi-Parameter Optimization of mm-Wave Speaker: Nourhan ELHAMAWY Antenna Layout Using Hybrid Modeling Authors: Nourhan ELHAMAWY, Jens and Incremental Model Learning ANDERS, Ilia POLIAN (University of Speaker: Ferhat Can Ataman (ASU) Stuttgart), Matthias SAUER (Advantest) 12:15 Lunch (MU 220 Turquoise) 13:45 Keynote Presentation: (MU 230 PIMA) Reliability Challenges in the Automotive High Performance Compute Landscape ▼ Speaker: Steve Pateras (Synopsys) 14:30 Regular Session 3: Validation and Special Session 3: Reliability on Regular Session 4: Test of Emerging Simulation (MU 228 Cochise)▼ Semiconductors & In-Memory Computing Technologies (MU 230 PIMA)▼ Hardware (MU 242 La Paz)▼ Session Chair: Ujjwal Guin (Auburn U) Session Chair: Yi Sun (NXP) Organizer: Daphne Chen (ASU) Characterization of 14nm CMOS A Method for Simulating Mixed-Signal ATE Session Chair: Daphne Chen (ASU) **Tests Technology At Cryogenic Temperatures** Speaker: Stephen SUNTER Using Dense Addressable Arrays Authors: Stephen SUNTER (Siemens Speaker: Raphael ROBERTAZZI From the Invisible to the Indispensable: Digital Industries Software), Vladimir Authors: Raphael ROBERTAZZI, David Nitrogen-Vacancy Magnetometry for Higher ZIVKOVIC (Infineon), Bartlomiej FRANK, John TIMMERWILKE, Kevin TIEN Yield and Reliability in Semiconductors PRASELSKI (Siemens Digital Industries (IBM Research), Peilin SONG (IBM Corp.), Speaker: Umberto Celano (ASU) Daniel FRIEDMAN (IBM Research) Software) Empowering analog computing with high Testing a Transistor-Level Programmable Reliability analysis and mitigation for precision Fabric: Challenges and Solutions analog computation-in-memory: from Speaker: Wenhao Song (USC) Speaker: Apurva JAIN technology to application Authors: Apurva JAIN, Thomas Speaker: Mahta MAYAHINIA A Test Platform for Characterizing BROADFOOT, Carl SECHEN (The Authors: Mahta MAYAHINIA (KIT **Emerging Nonvolatile Memories for** University of Texas at Dallas), Yiorgos university), Haneen G. HEZAYYIN, Mehdi Computing MAKRIS (UT Dallas) TAHOORI (Karlsruhe Institute of Speaker: Matthew Marinella (ASU) Technology) Logic-AAA: Debug of Logic Failures with Practical Considerations on ESD Testing an on-ATE Expert System Speaker: Albert Wang (UCR) Speaker: Chris NIGH Authors: Chris NIGH (Carnegie Mellon University), Shawn BLANTON (Carnegie Mellon Univ., Pittsburgh, USA) 15:30 Break (MU 220 Turquoise) 16:00 Regular Session 5: Security & Black Boxes Special Session 4: Cool Chips with Chiplets Special Session 5: Testing for Radiation (MU 230 PIMA)▼ (MU 242 La Paz)▼ Effects in Microelectronics (MU 228 Cochise)▼ Session Chair: Shaikh, Saghir (Intel) Organizer: Partha Pratim Pande (WSU) Organizer: Adalin Benedetto (Alphacore) Session Chair: Leslie Hwang (ASU) Fuzz Wars: The Voltage Awakens -Session Chair: Andrew Levy (Alphacore) Voltage-Guided Blackbox Fuzzing on **FPGAs** Thermal Modeling and Management Speaker: Jonas KRAUTTER Challenges in Heterogenous Integration: Total Ionizing Dose Testing of Alphacore's Authors: Kai SU (Karlsruhe University of ADC with ASU's Cobalt-60 GammaCell 2.5D Chiplet Platforms and Beyond Applied Sciences), Mark Leon GIRAUD Speaker: Umit Ogras (UWisc) Speaker: Adalin Benedetto (Alphacore) (Fraunhofer IOSB), Anne BORCHERDING (Fraunhofer Institute of Optronics, System Reliable Network-on-Interposer Design for Test Methods for Total Ionizing Dose Technologies and Image Exploitation CNN Inferencing in Presence of Defective Effects on Capacitors IOSB), Jonas KRAUTTER (Karlsruhe Chiplets Speaker: Chandru Ramamurthy Institute of Technology, Germany), Philipp Speaker: Partha Pande (WSU) (Alphacore) NENNINGER (Karlsruhe University of Applied Sciences), Mehdi TAHOORI Overcoming Communication Bottlenecks in Neutron Single Event Characterization and (Karlsruhe Institute of Technology) Scale-out Machine Learning with Silicon Simulation Fidelity for a CCD Imager Photonic 2.5D Interposer Networks Speaker: Merritt Miller (Fifth Gait) A Novel Self-referencing Approach Using Speaker: Sudeep Pasricha (CSU) Memory Power-up States for Detecting **COTS SRAMs** Speaker: Zakia Tamanna TISHA Authors: Gaines ODOM, Zakia Tamanna TISHA, Ujjwal GUIN (Auburn University) Static Gate-Level Information Flow for Hardware Information Security with **Bounded Model Checking** Speaker: Jiaji HE Authors: Yiqiang ZHAO, Gongsen QU, Qizhi ZHANG, Yao LI, Zhengyang LI, Jiaji HE (Tianjin University) 17:00 Time off/Walk to Reception Venue 18:00 Wine and Cheese Reception & Panel (College Avenue Commons 3rd Floor Atrium) Diversity, Equity, and Inclusion: What is it, who does it benefit, what works and what does not to increase DEI in the tech workspace? Moderator: Jennifer Blain Christen (ASU) Panelists: Bahadir Erimli (Cadence), Zachary Holman (ASU), Antonio de la Serna (Siemens EDA), Danielle Ferguson-Macklin (Teradyne), KT Moore (Cadence), Lorie Burmood (NXP) Collapse/Expand all days Tuesday, April 23, 2024 ▼ Collapse/Expand day's sessions 07:30 Registration & Breakfast (MU 220 Turquoise)

Authors: Mohamed MEJRI, Chandramouli AMARNATH, Abhijit CHATTERJEE (Georgia Institute of Technology) Drop-Connect as a Fault-Tolerance Approach for RRAM-based Deep Neural **Network Accelerators** Speaker: Mingyuan XIANG Authors: Mingyuan XIANG, Xuhan XIE (Univeristy of Chicago), Pedro SAVARESE (TTI-Chicago), Xin YUAN (Univeristy of Chicago), Michael MAIRE, Yanjing LI (University of Chicago) NN-ECC: Embedding Error Correction Codes in Neural Network Weight Memories using Multi-task Learning Speaker: Surendra HEMARAM Authors: Soyed Tuhin AHMED, Surendra HEMARAM, Mehdi TAHOORI (Karlsruhe Institute of Technology) 10:15 Break (MU 220 Turquoise) 10:45 Regular Session 7: In-field Reliability (MU 228 Cochise)▼ Session Chair: Daniel Gulick (ASU) Sequential Decoders for Binary Linear **Block ECCs** Speaker: Valentin GHERMAN Authors: Valentin GHERMAN, Cyrille LAFFOND (CEA LIST) Temperature-Insensitive Soft-Error-Tolerant Flip-Flop Design For Automotive **Electronics** Speaker: Yen-Ju SU Authors: Ralf E.-H. YEE, Yen-Ju SU, Lowry P.-T. WANG, Charles H.-P. WEN, Herming CHIUEH (National Yang Ming Chiao Tung University) Enhanced Wear-Out Sensor Design in a 12nm Process for Separable Stress Regime Monitoring Speaker: Ian HILL Authors: Ian HILL, Mateo RENDóN, Andre IVANOV (University of British Columbia)

11:45

13:00

14:00

(ASU)

Sensors

Technology)

15:00

16:30

17:00

07:30

08:30

09:15

Social Event **Banquet Dinner**

Collapse/Expand all days

Lunch (MU 220 Turquoise)

Ph.D. Competition (MU 230 PIMA)

Shamik Kundu - UT Dallas

Ishaan Bassi - Arizona State University

Shao-Chun Hung - Duke University

Regular Session 8: Testing Resistive

Memories & Sensors (MU 228 Cochise) ▼

Session Chair: Jennifer Blain Christen

Calibration and Source Localization Using

an Array of Resistive Metal Oxide Gas

Authors: Ishaan BASSI, Sule OZEV

Multi-Level Reference for Test Coverage

Speaker: Sina BAKHTAVARI MAMAGHANI

Authors: Sina BAKHTAVARI MAMAGHANI

Testing and Fault Diagnosis for Multi-level

Unicersity), Partho BHOUMIK, Krishnendu CHAKRABARTY (Arizona State University)

Student Research Forum & Career Fair (MU 220 Turquoise)

Resistive Random-Access Memory in

Authors: Shao-Chun HUNG (Duke

Time off/Walk to Bus for Social Event

Sheraton Wild Horse Pass Resort

Wednesday, April 24, 2024 ▼

Collapse/Expand day's sessions

Dr. David J. (Dave) Monk (NXP)

Regular Session 9: ML-Based Reliability

Session Chair: Suvadeep Banerjee (Intel)

Evaluating the Reliability of Supervised

Compression for Split Computing

Authors: Juan GUERRERO, Josie

Good Dice in Bad Neighborhoods

Authors: Cheng-Che LU, Chi-Chih

RODRIGUEZ CONDIA (Politecnico di

Torino), Marco LEVORATO (University of

California Irvine), Matteo SONZA REORDA

Transformer and Its Variants for Identifying

CHANG, Chia-Heng YEN (National Yang

Ming Chiao Tung University), Shuo-Wen

CHANG, Ying-Hua CHU (Qualcomm Inc.),

Kai-Chiang WU, Mango CHAO (National

WaferCap: Open Classification of Wafer

Authors: Abhishek Kumar MISHRA (Drexel

(The University of Texas at Austin), Anush LINGAMOORTHY, Suman KUMAR, Anup

(Drexel University), Nur TOUBA (University

Regular Session 10: BIST (MU 242 La Paz)

Session Chair: Prab Varma (Veda DS Inc.)

A Storage Based LBIST Scheme for Logic

Speaker: Subashini GOPALSAMY

POMERANZ (Purdue University)

Built in self test for RSFQ circuit

Speaker: Mingye LI

Authors: Subashini GOPALSAMY, Irith

Authors: Mingye LI, Yunkun LIN, Sandeep

GUPTA (University of Southern California)

Circuits using ON/OFF Keying and Delay

Structural Built In Self Test of Analog

Speaker: Suhas KRISHNA KASHYAP

Authors: Suhas KRISHNA KASHYAP

(Arizona state university), Chinmaye

University), Suriyaprakash NATARAJAN

(Intel Corporation), Sule OZEV (Arizona

RAGHAVENDRA (Arizona State

David Kim (Northrop Grumman)

Lunch (MU 220 Turquoise)

Special Session 12: IEEE Std P3405:

Standard-under-Development for Chiplet

Organizer: Erik Jan Marinissen (IMEC)

Analysis of Multi-Chiplet Package Designs

Speaker: Mike Kelly (Amkor Technology

Description with Google's Protocol Buffers

Speaker: Po-Yao Chuang and Erik Jan

How IEEE Std P3405 Enables EDA

Session Chair: Saket Kumar Goyal

& Requirements for Production Test

Chiplet Interconnect Repair Logic

(Broadcom)

Simplification

Marinissen (IMEC)

Interoperability

16:30

Closing Remarks (MU 230 PIMA)

USA)

Interconnect Test/Repair (MU 228 Cochise)

University), Mohammad Ershad SHAIK

Kumar DAS, Nagarajan KANDASAMY

Map Patterns using Deep Capsule

Speaker: Abhishek Kumar MISHRA

Speaker: Juan GUERRERO

(Politecnico di Torino)

Speaker: Cheng-Che LU

Chiao Tung University)

of Texas at Austin)

Break (MU 220 Turquoise)

10:15

10:45

Diagnosis

Monitors

State University)

11:45

12:30

14:00

Network

Evaluation (MU 242 La Paz)▼

Registration & Breakfast (MU 220 Turquoise)

Keynote Presentation: MEMS Design and Test Challenges (MU 230 PIMA)▼

Monolithic 3D Integration Speaker: Shao-Chun HUNG

Enhancement of Resistive-Based NVM

(Karlsruhe Institute of Technology),

Digital Industries Software), Mehdi

TAHOORI (Karlsruhe Institute of

Jongsin YUN, Martin KEIM (Siemens

Speaker: Ishaan BASSI

(Arizona State University)

Md Toufiq Hasan Anik - University of Maryland

 Zain Ul Abideen - Carnegie Mellon University Ahmed Abed Benbük - Arizona State University

Vineeth Amritur Niranjan - University of Texas at Dallas

08:30

09:15

Marvin Chang (TSMC)

Regular Session 6: Fault Tolerance for ML

Session Chair: Yiorgos Makris (UTD)

Computing Using Hypervector Encoding

Error Resilient Hyperdimensional

and Cross-Clustering

Speaker: Mohamed MEJRI

Accelerators (MU 230 PIMA)▼

Keynote Presentation: Challenges in Advanced Semiconductor Industry: Technology, Design, Testing and Talents (MU 230 PIMA)▼

Special Session 6: Reliability Assessment

Recipes for DNN Accelerators (MU 228

Organizer: Maksim Jenihhin (TalTech,

Session Chair: Seth Abraham (ASU)

Hybrid Analytical and Hierarchical FI-

Speaker: Maksim Jenihhin (TalTech,

Mixing techniques for the Reliability

Assessment of in-chip AI accelerators in

Speaker: Josie Esteban RODRIGUEZ

Reliability Assessment of DNN Hardware

Accelerators through Physical Fault

Speaker: Fernandes DOS SANTOS

Special Session 7: Silicon Lifecycle

Management (MU 230 PIMA)▼

Organizer: Gurgen Harutyunyan

Addressing the Combined Effect of

Transistor and Interconnect Aging in

Speaker: Mehdi Tahoori (Karlsruhe

An Efficient Lifecycle Test & Repair

Infrastructure for Addressing Lifetime-

Advanced SLM Sensors for Monitoring

Special Session 9: Ensuring Reliability &

Organizer: Seda Ogrenci (NWU)

AIN Sputtering Parameter Estimation

Speaker: Ahmet Enis Cetin (UIC)

Dynamic Monitoring of FPGA ML

Speaker: Seda Ogrenci (NWU)

Speaker: Nhan Tran (Fermilab)

for scientific applications

Using A Multichannel Parallel DCT Neural

A High Level Synthesis Methodology for

Reliable edge machine learning hardware

Special Session 10: Analog Calibration (MU

Organizer: Ahmet Tekin (Bogazici

Session Chair: Bertan Bakkaloglu (ASU)

Machine Learning Based Static and

Dynamic Error Calibration in Data

Speaker: Arindam Sanyal (ASU)

Power-up Self Auto Calibration of High

High Precision Adaptive Calibration

Speed SAR Converter in a 22nm FD-SOI

Speaker: Ahmet Tekin (Bogazici Univeristy)

Feedback in RF Front-end for Digital Pre-

Speaker: Emre Ulusoy (TUBITAK BILGEM)

PArtificial Intelligence Based High Power

Special Session 11: Gen. AI for Chip

Session Chair: Jeff Zhang (ASU)

Speaker: Mingjie Liu (NVIDIA)

CircuitOps and OpenROAD: An

Speaker: Vidya Chhabria (ASU)

ChipeNeMo: Domain-Adapted LLM for

Infrastructure for ML EDA Research and

LLMs for Hardware Design and Security:

Speaker: Jeyavijayan "JV" Rajendran

LLMs and Foundation Models for Chip

Speaker: Siddharth Garg (NYU)

Design: The Good, the Backdoors and the

IP Session 7: Yield Optimization (MU 242

Organizer: Carl Moore (YieldHub)

Session Chair: Carl Moore (YieldHub)

Information is key to yield improvement

Speaker: Carl Moore (YieldHub)

Sustainable Yield Improvement

Speaker: Jory Twitchell (NXP)

Test Hardware Design

Speaker: John O'Donnell (YieldHub)

Organizer: Vidya Chhabria and Jeff Zhang

Design (MU 228 Cochise)▼

(ASU)

Chip Design

Education

Boon or Bane

(TAMU)

Ugly

La Paz)▼

Keynote Presentation: Test Challenges for System-in-Package Products (MU 230 PIMA)▼

Calibration Method for RF Pulse Amplifiers

228 Cochise)▼

Univeristy)

Converters

CMOS Process

distortion Application

Speaker: A. Eroglu

Paz)▼

Session Chair:

Network

Accelerators

Security of AI through HLS4ML (MU 242 La

Degradation of Emerging Memories

Speaker: Fabian Vargas (IHP

Microelectronics)

Speaker: Bhrugurajsinh Chudasama (Intel)

SRAM Towards Silicon Lifecycle

(Synopsys)

Session Chair:

Management

Institute of Technology)

Induced Faults in CAMs

CONDIA (POLITO, Italy)

Array-Based DNN Accelerators

based Reliability Assessment for Systolic-

Cochise)▼

Estonia)

Estonia)

GPUs

Injection"

(INRIA, France)

IP Session 3: Test and Functional Safety

Standards (MU 242 La Paz)▼

Organizer: Arani Sinha (Intel)

IEEE 1687?

by 967 ballot comments

Session Chair: Arani Sinha (Intel)

What can I expect from the refresh of

Speaker: Martin Keim (Siemens-EDA)

P2427 analog defect modeling, improved

Speaker: Steve Sunter (Siemens-EDA)

initiative for the enablement of functional

IEEE P2851.1 - The standardization

safety interoperability with reliability

Speaker: Jyotika Athavale (Synopsys)

Special Session 8: VLSI Functional Safety

Organizer: Gulroz Singh (NXP)

Session Chair: Jim Plusquellic (UNM)

Speaker: Mahesh Kumarasamy (Samsung)

Unified Functional Safety Framework for

Advanced Multi-domain SoCs combining

Automotive Requirements from a

Semiconductor Perspective

ISO26262 & IEC 61508

Speaker: Gulroz Singh (NXP)

Speaker: Ankush Sethi (NXP)

Functional Safety landscape for IPs

IP Session 4: AI applications in test (MU

Organizer: Arani Sinha (Intel)

Session Chair: Stefano Di Carlo

AI In Test: Applications of Traditional ML

Optimizing manufacturing test in volume

AI Era Semiconductor Testing: AI/ML Use

Cases from Wafer to System-Level Testing

IP Session 5: Chiplet Interconnect Test and

Organizer: Sreejit Chakravarty (Ampere

Challenges of Chiplet Interconnect Test

Speaker: Pradipta Ghosh (Microsoft)

Speaker: Yervant Zorian (Synopsys)

Introducing IEEE P3405 and the chiplet

Speaker: Sreejit Chakravarty (Ampere

IP Session 6: Using AI to Address the

Silicon Growth Curve (MU 230 PIMA)▼

Organizer: Duane Brown (Advantest)

Session Chair: Duane Brown (Advantest)

interconnect test and repair standardization

Silicon health management for multi-die

and Repair and where Standardization will

Session Chair: Sreejit Chakravarty

Repair (MU 230 PIMA)▼

(Ampere Computing)

Computing)

help

systems

Computing)

Speaker: Sashi Obilisetty (Synopsys)

Speaker: Keith Schaub (Advantest)

and GenAI for Product Development

Speaker: Abhijit Sathaye (Intel)

(Politecnico di Torino)

230 PIMA)▼

production

(MU 242 La Paz)▼

Leveraging AI/ML to Design, Manufacture, and Test Advanced AI/ML Chips Speaker: Ira Leventhal (Advantest) AI For Test Optimization Early in Design Phase for Reduction in Test Patterns and **Design Schedules** Speaker: Sri Ganta (Synopsys) Revolutionizing Semiconductor Testing: The Fusion of LLMs like GPT-4 and **Human Expertise** Speaker: Keith Schaub (Advantest) IP Session 8: Advances on Silicon Lifecycle Reliability, Safety and Security (MU 230 Organizer: Fei Su (Intel) Session Chair: Sashi Obilisetty (Synopsys)

PIMA)▼

Addressing In-Field Dependability

Speaker: Jyotika Athavale (Synopsys)

Leveraging deep data analytics at test for

lifetime reliability, performance and safety

Speaker: Zohaib Khan (ProteanTecs)

Scalable Physical Attacks on chips

Speaker: Marc Witteman (Riscure)

Challenges with SLM

Speaker: Martin Keim (Siemens) 15:00 Panel: Naturally Dumb Test Methods: Tried and failed methods as a learning experience (MU 230 PIMA) ▼ Have you ever had a brilliant idea that you were eager to try? After long hours and many iterations, you realized that the approach was a failure no matter how you looked at your data. You investigated what went wrong and found out. In hindsight, it should have been obvious that the proposed technique wouldn't work. So, you filed it away to never speak of it again... until now... Would you like to share your experience so that others don't have to make the same mistake? More importantly, as a seasoned engineer, would you show young professionals that it's OK to explore failed methods. That is the most basic form of training your neural network. Moderator: Jelani Horne (Keysight) Panelists: Ray Sessego (NXP)

Stephen Sunter (Siemens EDA) Carl Moore (YieldHub) Rob Aitken (Synopsys)