08:00 - 09:30  Reception
08:00 – 09:30  Tutorial 1 – “Checkpointing and Debugging in Distributed Computing” Michel Raynal (Institut Universitaire de France & IRISA, Université de Rennes 1, France)

09:30 – 10:00  Welcome
10:00 – 11:00  Keynote Speaker – “A Data-Driven Approach to Security Science”
Dr. RAVISHANKAR K. IYER (University of Illinois, USA)

11:00 – 11:30  Coffee Break
11:30 – 13:00  Tutorial 2 – “Architecting Resilience in Self-Adaptive Systems” Rogério de Lemos (School of Computing, University of Kent, UK), Javier Cámara (University of Coimbra, PT)

13:00 – 14:00  Lunch

14:00 – 16:15  Technical Session I – Session Chair: Luiz Eduardo Buzato
14:00 – 14:25  “Robustness Evaluation of Controllers in Self-Adaptive Software Systems” Javier Camara, Nuno Laranjeiro, Rogerio de Lemos, Marco Vieira, Rafael Ventura – (University of Coimbra, PT and University of Kent, UK).

14:25 – 14:50  “Reliability Analysis of Software Architecture Evolution”
Joao Franco, Raul Barbosa, Mário Zenha-Rela - University of Coimbra, PT.

14:50 – 15:15  “A Model-Driven Approach for Runtime Reliability Analysis”
Dominik Sojer, Frank Reichenbach, Christian Buckl, Alois Knoll (Fortiss, Technische Universitate Muenchen, Germany and ABB Norway).

Joao Figueiras, Jesper Groenbaek, Andrea Bondavalli, Hans-Peter Schwefel, (The Telecommunications Research Center Vienna (FTW) Austria, University of Florence, Italy and Aalborg University, Denmark).
15:40 – 16:05 “Accelerating Online Model Checking” Muna Qanadilo, Sufyan Samara, Yuhong Zhao (An Najah National University, Germany and University of Paderborn, Germany).

16:05 – 16:15 Closing Technical Session I

16:15 – 16:30 Coffee Break

16:30 – 18:00 Student Forum Session – Session Chair: Hector Cancela

16:30 – 16:45 “Self-Adaptative System Case-Study of Architecture-Based Software Reliability” - João Franco (University of Coimbra, PT)

16:45 – 17:00 “Towards enhancing mobile user experience with internet and perception metrics” - Alfredo Cádiz, Gabriel Hourton, Grabriel del Canto (NIC Chile Research Labs, Chile)

17:00 – 17:15 “Benchmark the Resilience of Satellite Simulators - Denise Azevedo” (INPE, Brazil)

17:15 – 17:30 “A conditional Monte Carlo with intermediate estimations for computing MTTF of Markovian systems” - Leslie Murray (FCEIA, Universidad Nacional de Rosario, Argentina)

17:30 – 17:45 “Approximate Zero Variance Importance Sampling and Recursive Variance Reduction for diameter constrained reliability estimation” - María González, Maria Bertinat (Facultad de Ingeniería UDELAR, Uruguay)

17:45 – 18:00 Closing Student Forum Session

19:00 – 22:00 Symposium Cocktail

Wednesday – April 3rd

08:00 – 09:30 Tutorial 3 – “Holistic Optimization of Distribution Automation Smart-Grid Designs using Survivability Modeling” Alberto Avritzer (Siemens Corporate Research, USA), Daniel Mensache (Federal University of Rio de Janeiro, BR).

09:30 – 10:30 Keynote Speaker - “Security and Dependability Risks of Critical Information Infrastructures (or why Bang! is different from Crash) “ Dr. PAULO VERÍSSIMO (University of Lisbon, PT)

10:30 – 11:00 Coffee Break

11:00 – 13:00 Technical Session II – Session Chair: Marco Vieira

11:00 – 11:30 “Diagnosis of Content Pollution in P2P Live Streaming Networks” Roverli Zwich, Emanuel Schimidt, Elias P. Duarte Jr., Ingrid Jansch-Póorto (Federal University of Paraná, Brazil and Federal University of Rio Grande do Sul, Brazil).

11:30 – 12:00 “A Static Analysis of Dynamic Fault Trees with Priority-AND Gates” Jianwen Xiang, Fumio Machida, Kumiko Tadano, Kazuo Yanoo, Wei Sun, Yoshiharu Maeno (NEC Corporation, Japan).

12:00 – 12:30 “Battling Bad Bits with Checksums in the Loris Page Cache” David van Moolenbroek, Raja Appuswamy, Andrew S. Tanenbaum, (Vrije Universiteit Amsterdam, The Netherlands).


13:00 – 14:00 Lunch

14:00 – 16:15 Workshop on Dependability in Adaptive and Self-Managing systems - WDAS

14:00 – 14:15 Welcome


15:15 – 16:15 WDAS Technical Session I – Chair: Genaina Rodrigues


15:45 – 16:15 “Knowledge-Based Self-Adaptation” Emil Vassev, Mike Hinchey (Lero - the Irish Software Engineering Research Center, University of Limerick).

16:15 – 16:30 Coffee Break
16:30 – 17:30  WDAS Technical Session II – Chair: Flávia Delicato

17:30 – 18:30  WDAS Panel & Group Discussion
Thursday – April 4th

08:00 – 09:30  Tutorial 1 – “Checkpointing and Debugging in Distributed Computing” Michel Raynal (Institut Universitaire de France & IRISA, Université de Rennes 1, France)

09:30 – 10:30  TKeynote Speaker - “Durability with BookKeeper “
Dr. FLÁVIO JUNQUEIRA (YAHOO Research, Spain).

10:30 – 11:00  Coffee Break

11:00 – 12:30  Technical Session – Practical Experience Reports – Session Chair: Rogério de Lemos
“The time dimension predicting failures: a case study” Ivano Irrera, Carlos Pereira, Marco Vieira (University of Coimbra, PT).
“Assessing the Impact of Virtualization on the Generation of Failure Prediction Data” Ivano Irrera, João Durães, Henrique Madeira, Marco Vieira (University of Coimbra and DEIS-ISEC, PT)
“Defining a Representative and Low Cost Fault Load for Intermittent Faults” Joaquin Gracia-Moran, Daniel Gil-Tomas, Luis J. Saiz-Adalid, Juan-Carlos Baraza-Calvo, Pedro Gil (ITACA-UPV, Spain)

12:30 – 14:00  Lunch

14:00 – 16:15  Industrial Track – Chair: Fatima Mattiello Francisco

14:00 – 14:20  “Developing a Test Suite for Basic CWE Effectiveness - Phase 3” Paul E. Black, Hsiao-Ming (Michael) Koo, Thomas Irish (NIST, USA)

14:20 – 14:40  “An Experience of Using RACME Tool for V&V Process in Aerospace Domain” Lorenzo Vinerbi, Fabio Duchi, Fátima Mattiello-Francisco, Andrea Bondavalli (Resiltech, Italy)

14:40 – 15:00  “Using Abstract Interpretation to Produce Dependable Aerospace Control Software” Rovedy Aparecida Busquim e Silva, Nanci Naomi Arai, Luciana Akemi Burgareli (IAE, Brazil)

15:00 – 15:20  “Validation of the Satellite Speed Measurement System with the use of Formal Methods for Test Case Generation: One Experiment” Antonio Cassiano Júlio Filho, Auro Tikami, Ana Maria Ambrosio (INPE, Brazil)

15:20 – 15:40  “FMEA as a Design Improvement Tool of protoMIRAX Attitude Control Subsystem” Paulo Véras, Paulino Scherer, Fernando Silva, Priscila Renata Silva Barros, Valdivino Alexandre de Santiago Júnior (CMPSIS, Brazil)

16:00 – 16:20  “An Experience on Technology Transfer of CoFI Methodology to Automotive Domain” Fátima Mattiello-Francisco, Emília Villani, Eliane Martins, Thiago Dutra, Bruna Coelho, Ana Maria Ambrósio (FIAT, Brazil)

16:20 – 16:30  Coffee Break

16:30 – 16:50  “The SISNAV Software Project: a Report Experience” Synara Rosa Gomes dos Santos, Carlos Henrique Netto Lahoz (MECTRON, Brazil)

16:50 – 17:10  “A Framework for Dependability and Completeness in Requirements Engineering” Marina M.N. Zenun, Geilson Loureiro (EMBRAER, Brazil)

17:10 – 18:30  Panel - Why are Academy research results rarely used by Industry?

18:30  Conference Dinner
Invited Paper – “Dependable Information Broadcast in Sparsely Connected Networks” Sebastien Tixeuil (Sorbonne University, France)

Coffee Break

Technical Session III - Session Chair: Andrea Bondavalli

“Data Center Fault Tolerant Routing and Forwarding: An Approach based on Encoded Paths” Ramon Ramos, Magnus Martinello, Christian Esteve Rothenberg (Federal University of Espirito Santo and Fundação CPqD, Brazil).

“Automatically Tolerating Arbitrary Faults in Non-malicious Settings” Diogo Behrens, Stefan Weigert, Christof Fetzer (TU Dresden, Germany).

“Slicing as a Distributed Systems Primitive” Francisco Maia, Miguel Matos, Rui Oliveira, Etienne Rivière (INESC TEC / Universidade do Minho, PT and Université de Neuchâtel, Switzerland).

Lunch

Fast Abstract – Session Chair:

“Database Modularization applied to System Evolution” Gustavo Guedes, Gisele Baioco, Regina Moraes (School of Technology – UNICAMP, Brazil)

“Characterization of a Maximum Journey in MANETs” Alex Santana, Fabíola Greve, José Garcia, Luiz Laranjeira (Federal University of Bahia and University of Brasília, Brazil)

“Requirements of a Suitable Resilience Evaluation Framework for Ad hoc Networks” Miquel Martínez, Jesús Friginal, David de Andres, Juan Carlos Ruiz (Universidad Politècnica de Valencia, Spain)

Building Situation Awareness to Monitor Critical Infrastructures” Giani Petri, Raul Ceretta Nunes, Victor Lopez, Tarcisio Ceolin Junior, Osmar Marchi dos Santos (Federal University of Santa Maria, Brazil)

Towards Runtime V&V for Service Oriented Architectures” Cristiana Areias, Nuno Antunes, João Cunha, Marco Vieira (CISUC / University of Coimbra, PT)

“KBAM: Data Model of a Knowledge Base for the Monitoring Attacks” Giani Petri, Raul Ceretta Nunes, Victor Lopez, Tarcisio Ceolin Junior, Osmar Marchi dos Santos (Federal University of Santa Maria, Brazil)

Assessing software designs by simulation” Alfredo Capozucca (University of Luxembourg, Luxembourg)

“Realizing the Potential of Attack Patterns for Secure Software Development” Xiaohong Yuan (North Carolina A&T State University, USA)

Closing Fast Abstract Session

Coffee Break

LADC Closing Session

Business Meeting CE-TF/SBC