

Full Program

Monday, April 25	
0800 - 0830	Reception
0830 - 1200	Workshop: RACI
0830 - 0845	Welcome
0845 - 1000	Keynote "Making Sound Cyber Security Decisions through a Quantitative Metrics Approach" William H. Sanders (University of Illinois, USA)
1000 - 1015	A model-based approach for robustness testing generation Thaise Yano, Eliane Martins, University of Campinas, Brazil, Fabiano L. de Sousa, INPE, Brazil
1015 - 1030	ASTRO: a platform for quantifying sustainability impact and dependability in data centers Paulo Maciel, Federal University of Pernambuco, Brazil
1030 - 1100	Coffee Break
1100 - 1245	Panel "Resilience Assessment of CI: challenges and promising directions" Robin Bloomfield, City University London, UK João B. Camargo Jr., University of São Paulo, Brazil Mohamed Kaaniche, LAAS-CNRS, France William H. Sanders, University of Illinois at Urbana-Champaign, IL, USA
1100 - 1110	Facilitator introductions, Alberto Avritzer, Siemens Corporate Research, USA
1110 - 1150	Position paper presentations
1150 - 1245	Discussion
1145 - 1300	Wrap-up
1300 - 1400	Lunch
1400 - 1830	Workshop: EHCoS
1400 - 1415	Welcome
1415 - 1515	Keynote "On Challenges and Evolutions for Exception Handling" Christophe Dony LIRMM - CNRS and Montpellier-II University
1515 - 1615	Technical Session I Session Chair: Fernando Castor (UFPE, Brazil)
1515 - 1545	<i>eFlowMining: An Exception-Flow Analysis Tool for .NET Applications.</i> Israel Garcia, Nélio Cacho, Federal University of Rio Grande do Norte, Brazil

1545 - 1600	<i>Analyzing Exceptional Interfaces on Evolving Frameworks.</i> Eiji Adachi Barbosa, Alessandro Garcia, PUC-RJ, Brazil
1600 - 1615	<i>Towards Agile Testing of Exceptional Behavior.</i> Rafael Di Bernardo, Fernando Castor, Sérgio Soares, Federal University of Pernambuco, Brazil
1615 - 1645	Session Poster & Coffee
1645 - 1745	Technical Session I Session Chair: Nélio Cacho (UFRN, Brazil)
1645 - 1715	<i>Preserving the Exception Handling Design Rules in Software Product Line Context: A Practical Approach</i> Ricardo Sales Junior, Roberta Coelho, Federal University of Rio Grande do Norte (UFRN), Brazil
1715 - 1730	<i>Towards the Definition of a Context-Aware Exception Handling Mechanism</i> Delano Beder & Regina Araújo, Federal University of São Carlos (UFSCar), Brazil
1730 - 1745	<i>WSCA-DRIP: An Infrastructure to Web Service Composition Actions</i> Renato Manzoni, Amanda Nascimento, Cecília Rubira (UNICAMP), Brazil
1745 - 1830	Panel "Exception Handling in Contemporary Software Systems: Challenges and Promising Directions" Christophe Dony (Montpellier-II University, France) Alessandro Garcia (PUC-RJ, Brazil) Cecília Rubira (UNICAMP, Brazil) Marco Vieira (University of Coimbra, Portugal)

Tuesday, April 26

0800 - 0930	Tutorial 1 - Synchronization is coming back but is it the same? Michel Raynal (IRISA, France)
0930 - 1000	Welcome messages from the: INPE's Space Engineering Director - Mario Quintino General Chair - Ana Maria Ambrosio Technical Program Committee Chairs- Ellias Duarte Jr. Mohamed Kaaniche
1000 - 1100	Invited talk "Embedded software in Brasil" Edson Moreira (ICMC-USP, BRAZIL)
1100 - 1130	Coffee Break
1130 - 1300	Session 1: Distributed Algorithms Session Chair: Andrea Bondavalli (Un. Florence, Italy)
1130 - 1200	Byzantine Fault-Tolerant Deferred Update Replication Fernando Pedone, Nicolas Schiper, University of Lugano, Switzerland; José Armendáriz-Iñigo, Universidad Pública de Navarra, Spain
1200 - 1230	A Simple Snapshot Algorithm for Multicore Systems Damien Imbs, Michel Raynal, IRISA, France
1230 - 1300	Enhancing Fault Tolerance of Distributed Rtree Mathieu Valero, Luciana Arantes, Maria Potop-Butucaru; Pierre Sens, LIP6, University of Paris 6, France
1300 - 1400	Lunch
1400 - 1530	Session 2: Security Session Chair: Raul Ceretta (UFSM, Brazil)
1400 - 1430	On the Reliability and Availability of Systems Tolerant to Stealth Intrusion Luís Brandão, Universidade de Lisboa, Portugal and Carnegie Mellon University, USA; Alysson Bessani, Universidade de Lisboa, Portugal
1430 - 1500	Detection of Attacks in Wireless Mesh Networks Anderson Morais, Ana Cavalli, Télécom SudParis, France

1500 - 1530	Benchmarking the Security of Web Serving Systems Based on Known Vulnerabilities Naaliel Mendes, João Durães, Henrique Madeira, University of Coimbra, Portugal
1530 - 1830 * attention to parallel section	Student Forum Chair: Raul Barbosa (Um. Coimbra, Portugal) and Eliane Martins (UNICAMP, Brazil)
1530 - 1550	Towards Security Benchmarking of Transactional Systems Afonso Araújo Neto, Un de Coimbra, Portugal
1550 - 1610	An approach for dependability conformance analysis from code to architecture description Rovedy A. B. e Silva, IAE, Brazil
1610 - 1630	Security validation through fault injector plug-in Renato Galantini, UNICAMP, Brazil
1630 - 1650	Validation of reasoning and decision-making of a satellite autonomous on-board software Fabricio, N. Kucinskis, INPE, Brazil
1650 - 1710	Benchmarking the security of Web serving systems Naaliel Mendes, Un of Coimbra, Portugal
1710 - 1730	An architecture for test procedures execution applied to a satellite's on-board data handling computer (OBDDH) Thiago D. Pereira, INPE, Brazil
1730 - 1750	A MPI implementation of Gusfield's algorithm to generate cut trees Luiz A. Rodrigues, Un Federal do Paraná, Brazil
1750 - 1810	FPGA-based fault injection architecture for real time software André Corseti, INPE, Brazil
1530 - 1830 * attention to parallel section	Fast Abstract Chair: Hector Cancela (U.de La Republica, Uruguay)
1530 - 1550	Testing model transformations which derive executable test cases from abstract ones Erika R.C. de Almeida, Eliane Martins, UNICAMP, Brasil
1550 - 1610	Generating test scenarios and improving software quality with model-based testing Caroline C. Letizio, UNICAMP, Brazil; Fernando R. Villas-Boas, Bruno T. de Abreu, Sofist, Brazil
1610 - 1630	Model Checking a Decentralized Storage Deduplication Protocol João Paulo, José Pereira, Un do Minho, Portugal
1630 - 1650	A Bidimensional Wavelet Transform based Algorithm for DoS Attack Detection Renato P. de Azevedo, Bruno Mozzaquatro, UFSM, Brazil; Cristian Cappelletti, Christian E. Schaerer, UMA, Paraguay; Raul Cereta Nunes, Alice Kozakevicius, UFSM, Brazil.

1650 - 1710	Achieving Eventual Leader Election in WS-Discovery Filipe Campos, José Pereira, Rui Oliveira, Un do Minho, Portugal
1710 - 1730	Generation Environment, Execution and Test Management Software Embedded Marcos F. Reis, Ana M. Ambrosio, Mauricio Ferreira, INPE, Brazil
1730 - 1750	How Much Test Costs Are Impacted by Test Environment Development and Maintenance? Cassio H. Mendonça, EMBRAER, Brazil; Ana M. Ambrosio, INPE, Brazil
1750 - 1810	Partial Plant Models in Formal Verification of Industrial Automation Discrete Systems José Machado, José C. Campos, Un do Minho, Portugal
1810 - 1830	A New State-Model Based Approach for Requirement Refinement on Verification and Validation of Space Applications Marcelo H. E. de Moraes, Ana M. Ambrosio, INPE, Brazil
1830 - 1850	Supporting requirements formulation in software formal verification José C. Campos, José Machado, Un do Minho, Portugal
1900 - 2200	Cocktail - Novotel hotel

Wednesday, April 27

0800 - 0930	Tutorial 1 - Synchronization is coming back but is it the same? Michel Raynal (IRISA, France)
0930 - 1030	Invited talk <i>"Diagnosis in Practice"</i> Rick Schlichting - AT&T Labs - USA
1030 - 1100	Coffee Break
1100 - 1230	Session 3: Diagnosis and System Dependability Session Chair: Luciana Arantes (U. Paris VI, France)
1100 - 1130	Energy-Aware Test Connection Assignment for the Diagnosis of a Wireless Sensor Network Andréa Weber, Alexander Robert Kutzke, Federal University of Paraná, Brazil; Stefano Chessa, University of Pisa and ISTI- CNR, Italy
1130 - 1200	Resource Optimization and Energy Saving in Clusters Using Virtualization Marcus Azevedo, Andre Felipe Monteiro, Alexandre Sztajnberg, Universidade do Estado do Rio de Janeiro, Brazil
1200 - 1230	Exception Handling for Service Component Architectures

	Douglas Siqueira Leite, Cecília Rubira, University of Campinas, Brazil; Fernando Castor, Federal University of Pernambuco, Brazil
1230 - 1400	Lunch
1400 - 1530	Session 4: Fault Injection: Practical experience reports and tool Session Chair: Henrique Madeira (U.Coimbra, Portugal)
1400 - 1430	On Selecting Representative Faultloads to Guide the Evaluation of Ad Hoc Networks Jesús Friginal, David de Andres, Juan Carlos Ruiz Garcia, Pedro Gil, Universidad Politécnica de Valencia, Spain
1430 - 1500	Collecting, Analyzing and Archiving Results from Fault Injection Experiments Jean Arlat, LAAS-CNRS and University of Toulouse, France; Regina Moraes, University of Campinas, Brazil
1500 - 1530	J-SWFIT: A Java Software Fault Injection Tool Bruno Sanches, Tania Basso, Regina Moraes, University of Campinas, Brazil
1545 - 2230	Cocktail/Dinner at Mirante do Paraíba restaurant Guararema (www.mirantedoparaiba.com.br)

Thursday, April 28

0800 - 0930 (*) attention to parallel section	Tutorial 2 - Gossip-Based Multicast. José Pereira (Un. Minho, Portugal)
0800 - 0930 (*) attention to parallel section	Tutorial 3 - Assessing DBMS Security Afonso Araújo Neto e Marco Vieira (U. Coimbra, Portugal)
0930 - 0940	Welcome from the Industrial Track Chairs Fátima Mattiello-Francisco João Batista Camargo
0940 - 1040	Invited talk "Space systems dependability: the hybrid necessity" Jean-Paul Blanquart - Astrium-EADS - FRANCE
1040 - 1110	Coffee Break
1110 - 1230	Industrial Track 1: Session Chair: Alderico de Paula (UNIVAP, Brazil)

1110 - 1130	Modification to Legacy Software Developed per DO-178A Level 1 to DO-178B Level A: A Guideline to Organize Software Life Cycle Data for Software Certification Johnny Cardoso Marques - EMBRAER
1130 - 1150	Dependability Issues of INPE's ESA/CCSDS Telecommand/Telemetry Subsystem Eduardo Augusto Bezerra - UFSC Eurides Michel da Silva - Aeroeletrônica
1150 - 1210	The Dependability Approach for the New Version of VLS On Board Software Elmer Dotti - ITA Carlos H. N. Lahoz - IAE Marcos A. S. Romani - IAE
1210 - 1230	Practical Results from Requirements Verification for HW/SW Complex Systems Nuno Silva - Critical Software Rui Lopes - Critical Software
1230 - 1400	Lunch
1400 - 1620	Industrial Track 2: Session Chair: Edgar Yano (ITA, Brazil)
1400 - 1420	Automated validation of embedded optical network software Aline Cristine Fadel - CPqD Regina Moraes - ET/UNICAMP Eliane Martins - IC/UNICAMP
1420 - 1440	A Practical Formal Approach for Requirements Validation and Verification of Dependable Systems Miriam C. Bergue Alves - IAE Doron Drusinsky - Time Rover Inc. Man-Tak Shing - NPS/USA
1440 - 1500	A Dependable Vision System for Testing an Electronic Control Unit, Using Hardware In the Loop Thiago Martins de Vasconcelos - FIAT Alexandre Wagner Chagas Faria - FIAT
1500 - 1520	WSRTesting: Hands-on Solution to Improve Web Services Robustness Testing G. Carrozza - SESM Scar N. Laranjeiro - University of Coimbra A. Napolitano - SESM Scar M. Vieira - University of Coimbra
1520 - 1540	Advance adherence to the upcoming standard ISO/IEC 29119 Fernando R. Villas-Boas - Sofist Érika R. C. de Almeida - IC/UNICAMP Bruno T. de Abreu - Sofist
1540 - 1600	An Instrumentation Tool for Airborne Safety Critical Software Roberto Morigaki - EMBRAER
1600 - 1620	Applying the CoFI Testing Methodology to a Multifunctional Robot End-Effector Jose Marcos Silva Anjos - ITA Juliano Gripp - ITA Rodrigo Pastl Pontes - ITA Emília Villani - ITA
1620 - 1740	Industrial Track 3: Session Chair: Marcelo José Ruv (Embraer, Brazil)
1620 - 1640	Qualification and Selection of Off-The-Shelf components for Safety Critical Systems: a Systematic Approach Christian Esposito - CINI Domenico Cotroneo - CINI

	Ricardo Barbosa - Critical Software Nuno Silva - Critical Software
1640 - 1700	Interesting results with an optimizing compiler when refactoring embedded code Márcio Afonso Arimura Fialho - INPE
1700 - 1720	A Reliable Computational System for Estimate the Performance Curve of PMDC Motors Giorgio Felix da Silva - FIAT Samantha Teixeira Marques - FIAT Alexandre Wagner Chagas Faria - FIAT
1720 - 1740	Use of Design Diversity to Mitigate COTS Design Faults in Flight Controls System Applications Humberto Manelli Neto - EMBRAER Marcelo Lopes de Oliveira e Souza - INPE
1900 - 2200	Barbecue

Friday, April 29

0800 - 0930 * attention to parallel section	Tutorial 2 - Gossip-Based Multicast. José Pereira (Un. Minho, Portugal)
0800 - 0930 * attention to parallel section	Tutorial 3 - Assessing DBMS Security Afonso Araújo Neto e Marco Vieira (U. Coimbra, Portugal)
0930 - 1030	Invited talk "GENESYS—A Cross-Domain Architecture for Dependable Embedded System"s Hermann Kopetz (University of Vienna, AUSTRIA)
1030 - 1100	Coffee Break
1100 - 1230	Session 5: Software Dependability: Assessment and Verification Session Chair: Jean Arlat (LAAS-CNRS, France)
1100 - 1130	RACME: A Framework to Support V&V and Certification Andrea Ceccarelli, University of Firenze; Lorenzo Vinerbi, Lorenzo Falai, Resiltech; Andrea Bondavalli, University of Firenze, Italy
1130 - 1200	Architecture-Based Criticality Assessment of Software Systems Domenico Cotroneo, Antonio Pecchia, Roberto Pietrantuono, Stefano Russo, Università degli Studi di Napoli Federico II, Italy
1200 - 1230	Validation of Exception Handling in the Development of Dependable Component-Based Software Systems Jeferson Ferreira, Eliane Martins, Cecilia Rubira, University of Campinas, Brazil; Patrick Brito, Federal University of Alagoas, Brazil
1230 - 1400	Lunch
1400 - 1530	Session 6: Distributed Systems Session Chair: Livia M.R. Sampaio (UFCEG, Brazil)
1400 - 1430	Timing Analysis of Leader-based and Decentralized Byzantine Consensus Algorithms Fateme Borran, Martin Hutle, André Schiper, EPFL, Switzerland
1430 - 1500	A Self-Manageable Group Communication Protocol For Partially Synchronous Distributed Systems Raimundo José de Araújo Macêdo, Federal University of Bahia; Allan Freitas, Federal University of Bahia and

	Federal Institute of Bahia; Alirio Sá, Federal University of Bahia, Brazil
1500 - 1530	Load Balancing for Internet Distributed Services using Remote Resource Reservation Alan Nakai, Edmundo Madeira, Luiz Eduardo Buzato, University of Campinas, Brazil
1530 - 1600	Closing
1600 - 1700	Business Meeting CE_FT/SBC