

Sunday October 8-th

16:00 – 20:00 Registration and **welcome cocktail** -
IMT - Chiostro San Francesco (San Francesco Cloister)

Monday October 9-th

9:00-10:00 Registration & welcome coffee
IMT - Chiostro San Francesco

10:00-10:30 Welcome by the Organizers & Conference Information

10:30 Institutional talks
Generale.B.A Francesco Vestito - Comando Interforze per le Operazioni
Cibernetiche

Session I “Modelling & Simulations”

11:30 Keynote:

“Simulation as a Service for grid operators by SIM-CI”



Igor van Gemert
- **SimCi** - Alliander Den Haag, The Netherlands.

12:10 Contributed 17 Michael Rausch et al. - University of Illinois at Urbana-Champaign “*Automatically Generating Security Models from System Models to Aid in the Evaluation of AMI Deployment Options*”

12:30 Contributed 40 Seungoh Choi - South Korea – “*One step more : Automatic ICS Protocol Field Analysis*”

12:50 Lunch Break (2h)

Session II “Cyber-Physical Systems & Industry 4.0”

14:50 Keynote: Jose Luís Marzo

“Network robustness under massive failures: relevant metrics analysis and simulation.”



Jose Luís Marzo - Univ. of Girona & Kansas State University

15:30 Juan E. Rubio et al. – Univ. of Malaga “*Analysis of cyber-security threats in Industry 4.0: the case of intrusion detection*”

15:50 Mohamad Gharib et al. – Univ. of Florence “*Dealing with Functional Safety Requirements for Automotive Systems: A Cyber-Physical-Social Approach*”

16:10 Pol Van Aubel - Radboud University “*Side-channel based intrusion detection for industrial control systems*”

16:30 Coffee Break (20’)

Session III “Poster lightening talks”

16:50 – 18:30 5’ to Each poster

Poster Session with Light Dinner

19:00 – 21:00 IMT - Chiostro San Francesco

Tuesday October 10-th

Session IV “Cyber Security”

9:00 Communications & Information

9:20 Keynote: Roberto Baldoni

“Thwarting Cyber Attacks: Scientific Alignment and the Italian Landscape”



Roberto Baldoni- Università Roma I "Sapienza" - Research Center for Cyber Intelligence and Information Security (CIS) Italy .

10:00 Natalia Reka Ivanko et al. “*Towards Blockchain-Based Collaborative Intrusion Detection Systems*”

10:20 Stefano Panzieri et al. – Univ Rome III “*Faulty or Malicious Anchor Detection Criteria for Distance-Based Localization*”

10:40 Coffee Break (30’)

Session V “Electric System and Special Applications”

11:10 Zejun Yang and Jose Marti “*Resilience of Electrical Distribution Systems with Critical Load Prioritization*”

11:30 Alberto Tofani et al. – ENEA “Operational Resilience metrics for a complex electrical networks”

11:50 Steffen O. P. Blume and Giovanni Sansavini - ETZ “The influence of load characteristics on early warning signs in power systems”

12:10 Erich Rome et al. “Towards a Common Vocabulary for Crisis Management Scenarios”

12:30 Stefano Starita, Annunziata Esposito Amideo and Maria Paola Scaparra “Assessing Urban Rail Transit Systems Vulnerability: Metrics vs. Interdiction Models”

12:50 Lunch Break (1h 40’)

Session VI “Projects Cross Dissemination I”

14:30 ESReDA "European Safety, Reliability & Data Association"

Presenter Luís Andrade Ferreira, University of Porto

14:45 EU-CIRCLE "A panEuropean framework for strengthening Critical Infrastructure resilience to climate change"

Presenter Dr Athanasios Sfetsos, Thanasis Demokritos

15:00 HyRiM “Hybrid Risk Management for Utiliti Providers”

Presenter Stefan Schauer - AIT Austrian Institute of Technology GmbH

15:15 MITIGATE “Protecting Maritime Supply Chain IT Infrastructure”

Presenter TBD

15:30 RESOLUTE “Operationalization appLied to Urban Transport Environment”

Presenter Emanuele Bellini Univ. Firenze

15:45 RESIN “Climate Resilient Cities and Infrastructures”

Presenter Erich Rome Fraunhofer

16:00 ROMA “Resilience enhancement of a Metropolitan Area”

Presenter Alberto Tofani ENEA

16:15 Coffee Break (15’)

Session VII “Projects Cross Dissemination II”

16:30 SEGRID “Secures the Smartgrid of Tomorrow”

Presenter Frank Fransen TNO

16:45 IMPROVER “Improved risk evaluation and implementation of resilience concepts to Critical Infrastructure”

Presenter TBD

17:00 ERNCIP “European Reference Network for Critical Infrastructure Protection”

Presenter Marianthi Theocharidou, European Commission, Joint Research Centre

17:15 SecureWater “Improved SECure and RESilient cyber physical systems for scada in WATER systems enhanced by comprehensive analysis capabilities” - Luigi Martino, Scuola Superiore Sant. Anna

& HANSEL “Health Automation SystEms Laboratory Health Automation SystEms Laboratory”

Presenter Gabriele Oliva, NITEL & University Campus Bio-Medico of Rome
17:30 ATENA “Advanced tool to assess and mitigate the criticality of ICT components and their dependencies over Critical Infrastructures”

Presenter Stefano Panzieri, Dip di Ingegneria, Università degli Studi ROMA TRE

17:45 ZONESEC “Towards an EU framework for the security of Widezones”
Presenter Dimitris Petrantonakis, EXODUS S.A

18:00 ROMA “Smart Mature Resilience for more resilient cities in Europe”
Presenter Raquel Gimenez, TECNUN, University of Navarra

19:00 **Concert:** "LE DONNE DI PUCCINI" by "**Puccini e la sua Lucca**"
(reserve your ticket at the Registration Desk)

20:30 **Social Dinner** (reserve your ticket at the Registration Desk)

Wednesday October 11-th

9:00 Keynote: José Javier Larrañeta
"Infrastructure interdependence in industrial and technological wide areas"



Javier Larrañeta

- PESI Spanish Technology Platform on Industrial Safety & Security - Parque Tecnológico de Araba, C/ Leonardo da Vinci 11, 01510-Miñano (Araba) Oficina en Madrid (TECNALIA): C/ Velázquez 64-66, 2ª, 28001-MADRID

Session VIII “Young Critis Award”

9:40 Anna Bozza et al. – Univ Federico II –“*Role of urban interactions and damage in seismic resilience of historical centers*”

10:00 James Wright et al. - Royal Holloway Information Security Group “*De-Synchronisation Attack Modelling in Real-Time Protocols Using Queue Networks: Attacking the ISO/IEC 61850 Substation Automation Protocol*”

10:20 Carlo Giudicianni et al. – Univ. degli Studi della Campania “Luigi Vanvitelli” “*DMA optimal layout for protection of water distribution networks from malicious attack*”

10:40 Coffee Break (30’)

Session IX “Transports & Human Activities”

11:10 Georgia Lykou, George Iakovakis, George Chronis and Dimitris Gritzalis “*Analysis and Classification of Adaptation Tools for Transport Sector Adaptation Planning*”

11:30 Laura Petersen et al. “*Public tolerance levels of transportation resilience: a focus on the Oresund region within the IMPROVER Project*”

11:50 Antonio De Nicola et al. “*A Gamified Approach to Participatory Modelling of Water Systems Risks*”

12:10 Chih-Yuan Lin et al. - Linköping Universitet - “*Timing-based Anomaly Detection in SCADA Networks*”

12:30 Vincenzo Fioriti et al. – ENEA “*Motion magnification for urban buildings*”

12:50 Aljoscha Lautenbach, Magnus Almgren and Tomas Olovsson “*What the Stack? On Memory Exploitation and Protection in Resource Constrained Automotive Systems*”

13:10 Lunch Break (2h 10’)

Session X “Awards – Discussion - Closing Remarks”

15:00 Young Critis Award

15:20 Best Poster Award

15:40 Critis Future Round table (Members of the Critis Board)

16:10 CRITIS2018 Presentation

16:20 Proceedings information - Thanksgiving and Closing Remarks

Thursday October 12-th Complex Water Infrastructures Workshop

Program: TBD & extended

Opening Introduction: Lorenzo Bardelli - Italian regulation authority for electricity, gas and water systems

Keynote Speakers:

- Armando Di Nardo, Universita' degli studi della Campania "Luigi Vanvitelli"
- Natan Zuta, IOSIGHT, Israel
- Alfonso Damiano, University of Cagliari
- Giuseppe Sardu, Acque S.p.A (TBC)
- Alessandro Mazzei - Tuscan water regulation authority (TBC)
- Emanuele Perugini, Trenta science Communications

Friday October 13-th
Complex Energy Infrastructures Workshop

9:15-9:30 Angelo Facchini - Welcome and introduction

9:30-10:00 Riccardo Basosi, University of Siena

10:00-10:30 Alessandro Rubino, OFGEM, UK

10:30-11:00 Refreshment Break

11:30-12:00 Umberto Perna, Society of Petroleum Engineers

12:00-12:30 Renata Mele, Enel Foundation (TBC)

12:30-13:00 Alfonso Damiano, University of Cagliari

12:30-12:45 Antonio Scala - Closing remarks