

	Ballroom A	Ballroom B
8.20-10.30	Symposium opening session and keynote speech	
10:30 - 11:00	COFFEE BREAK	
11:00 - 12:40	<p style="text-align: center;"><b>IB1- System Thinking Benefits</b></p> <p>1570822382 - Systems Thinking and Model Based Systems Engineering's Utility to Solve Complex Organizational Problems - Cyber-Physical System Design Teams</p> <p>1570822262 - Building a Semantic Layer for Early Design Trade Studies in the Development of Commercial Aircraft</p> <p>1570826825 - How does Systems Thinking support the understanding of complex situations?</p> <p>1570829316 - Safety Management Complexity: A Systems Thinking Approach</p>	<p style="text-align: center;"><b>IB2- Agile Development Methods</b></p> <p>1570815054 - Transfer of DevOps to Multi-Disciplinary Systems</p> <p>1570818050 - Analysis of the criteria for comparing Systems Engineering and agile methods</p> <p>1570822200 - Agile Systems Engineering in Regulated Industries</p> <p>1570821165 - Functional Performance Metric as Effort Prediction</p>
12:40 - 13:50	LUNCH BREAK	
13.50-15.30	<p style="text-align: center;"><b>IC1 - Engineering processes and systems</b></p> <p>1570815109 - Risk Identification with Entity Attributes Diagrams in Business Process Modeling</p> <p>1570819254 - Overview of the Engineering Change Management Process in a Complex Multi-Domain System</p> <p>1570822010 - The Capability Concept in the Context of Systems of Systems: A Systematic Literature Review</p> <p>1570822348 - Integration of technical processes: practical examples from the experiences made for the design of ITER fusion reactor systems</p>	<p style="text-align: center;"><b>IC2 - Systems Societal impact</b></p> <p>1570805579 - Exploring doctors' satisfaction with electronic health records and its features: A nationwide survey study</p> <p>1570822311 - Upgrading Approach for MaaS Level 4 Using UAF</p> <p>1570822370 - Citizen sensing system optimization for infrastructure monitoring: developing community currency model which incentivizes behavior changes of "citizen sensors"</p> <p>1570821913 - Methods for Developing Successful Systems Engineers</p>
15:30-16:00	COFFEE BREAK	
16.00-18.10	<p style="text-align: center;"><b>ID1 - Model Based Systems Engineering I</b></p> <p>1570818085 - Advanced Engineering Change Impact Approach (AECIA) - Towards a model-based approach for a continuous Engineering Change Management</p> <p>1570821174 - Using MBSE With SysML to Analyze Change Impacts, Including Efforts, in Technical Systems</p> <p>1570784682 - Explore MBSE Strategy at Requirement Engineering of Small Satellite</p> <p>1570821861 - Model-Based STPA: Towards Agile Safety-Guided Design with Formalization</p>	<p style="text-align: center;"><b>ID2 - Systems Security and Requirement Management</b></p> <p>1570819033 - Cybersecurity in Industrial Control Systems - An integration of information technology and operational technology</p> <p>1570836666 - Is Self-Sovereign Identity System Really Sovereign?</p> <p>1570836667 - Comparing Attack Models for IT Systems: Lockheed Martin's Cyber Kill Chain, MITRE ATT&amp;CK Framework and Diamond Model</p> <p>1570821907 - Systems-Engineering-based Requirements Reuse in Accordance with Stakeholder Needs in Automotive Product Development</p> <p>1570822093 - Requirements Validation Framework for Major Infrastructure Projects</p>

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<b>8.20-10.30</b>	<p style="text-align: center;"><b>2A1 - Medical Systems</b></p> <p>1570805598 - Impact of patient-centered care on cancer beliefs and knowledge: a social cognitive theory application</p> <p>1570820799 - Mobile health in comorbidity settings</p> <p>1570821002 - A Bio-Mechanical System of Systems for Heart Failure Patients</p> <p>1570826552 - Patients' perception of Integrating AI into healthcare: systems thinking approach</p> <p>1570826085 - Caregivers' experience with telehealth during Covid-19: a quantitative study in the United States</p>	<p style="text-align: center;"><b>2A2 - Model Based Systems Engineering II</b></p> <p>1570826691 - GONG: an open source Ontology Based System Engineering toolset</p> <p>1570826702 - Accelerating Simulation-Enabled Engineering</p> <p>1570826717 - Fostering Model Consistency in Interdisciplinary Engineering by Linking SysML and CAD-Models</p> <p>1570826776 - Application and Adaptation of a Process Model for Data-Driven Validation of the System of Objectives</p> <p>1570830061 - Towards Articulating Failures for Building Resilience in Robot Swarms: A Case Study in Model-Based Systems Engineering</p>
<b>10:30 - 11:00</b>	COFFEE BREAK	
<b>11:00 - 12:40</b>	<p style="text-align: center;"><b>2B1 - Model Based Systems Engineering III</b></p> <p>1570822144 - Collaboration between System Architect and Simulation Expert</p> <p>1570822166 - Reduced Order Modeling of a Heat Exchanger with a Stacking Ensemble to reduce Computational Inefficiencies</p> <p>1570822180 - System modeling process with SysML assuming the use of models</p> <p>1570822203 - Functional Cost Modelling &amp; Management</p>	<p style="text-align: center;"><b>2B2 - Risk management</b></p> <p>1570826356 - Obstacles of System-of-Systems</p> <p>1570817294 - Measuring Health Systems Resilience: A Comparative Study Of Turkey's Health System During Covid-19 Pandemic</p> <p>1570822046 - Safe Integration of Autonomous Machines in Underground Mining Environments</p> <p>1570825714 - A Risk Analysis Study: Model Development for Risk Mitigation and Systematic Approach to FTI System Design Activities</p>
<b>12:40 - 13:50</b>	LUNCH BREAK (included in registration)	
<b>13.50-15.30</b>	<p style="text-align: center;"><b>2C1 - Data, models, simulations</b></p> <p>1570817005 - Multi domain physics-based modeling for finding root cause of pressure oscillations on aircraft landing gear brake control system</p> <p>1570822186 - Towards a Data Engineering Process in Data-Driven Systems Engineering</p> <p>1570822207 - Systems Engineering and Simulation: Towards a Unified Methodology for Developing Cyber-Physical Systems</p> <p>1570826827 - Differentiation of Engineering Models by Physical Effects</p>	<p style="text-align: center;"><b>2C2 - Systems architecture</b></p> <p>1570822268 - Extended RFLP for complex technical systems</p> <p>1570825722 - A viewpoint-based evaluation method for future Automotive Architectures</p> <p>1570826727 - Development of System Alternatives using Generative Engineering</p> <p>1570826812 - Definition and use of logical and physical architecture within vehicle concept development</p>
<b>15:30-16:00</b>	COFFEE BREAK	

	Ballroom A	Ballroom B
16.00-18.10	<p><b>2D1 - Requirements and Validation</b></p> <p>1570822055 - Requirements for the Development of Systems Engineering Innovations</p> <p>1570822192 - Validation of Obstacle Detection for Rail Vehicles using a dynamic Ground Truth System</p> <p>1570822223 - Stochastic Scenario Exploration with Constrained Parameters for Aircraft System Virtual Testing</p> <p>1570822259 - Efficient Extraction of Technical Requirements Applying Data Augmentation</p>	<p><b>2D2 - Special Session THEFOSE</b></p> <p>1570820906 - Structure Preserving Transformations for Practical Model-based Systems Engineering</p> <p>1570821843 - Grid connected Hybrid Energy Multi level inverter for power distributed systems using ANFIS Controller</p> <p>1570822274 - Consistency of multiple system engineering models of a fixed wing drone</p> <p>1570826130 - Natural Language Processing of Specifications for a Prototypical Avionic System to Generate System Design: A Case Study</p> <p>1570826824 - Towards Digitalization of Physical Effect Libraries</p>

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<b>8.20-10.30</b>	<p style="text-align: center;"><b>3A1 – Model Based Systems Engineering IV</b></p> <p>1570822220 - Examples of AI-based Assistance Systems in context of Model-Based Systems Engineering</p> <p>1570825922 - A theoretical, methodological and technical contribution for modeling and V&amp;V in MBSE context</p> <p>1570826264 - Modeling Inclusive Systems in SysML</p> <p>1570822006 - Implementation of Systems Engineering: A maturity-based approach</p> <p>1570826650 - Guidelines for systematic functional decomposition in model-based systems engineering</p>	<p><b>Systems Chapter Community Discussion:</b></p> <p>Community session with chapter members</p>
<b>10:30 – 11:00</b>	COFFEE BREAK	
<b>11:00 – 12:40</b>	<p style="text-align: center;"><b>3B1 – Systems RAMS</b></p> <p>1570822176 - An Electromagnetic Gripper for Multiple Picking of Iron Laser-Cut Parts</p> <p>1570826477 - A first proposal of a data-driven reliability life cycle for complex systems</p> <p>1570826679 - Low-cost accurate inductive system for thickness measurement of industrial ferromagnetic plates</p> <p>1570826708 - Design and Implementation of a Low Cost System for Accurate Impedance Spectroscopy</p>	<p><b>Business Meeting with Chapter Chairs:</b></p> <p>Welcome and Introductions</p>
<b>12:40</b>	SYMPOSIUM ENDS	