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## Chair's Welcome Message

Welcome to the Smart Digital Futures 2015 (SDF-15) multi-theme conference, held in Sorrento, Italy, on 17-19 June 2015.

SDF-15 is an amalgamation of four KES conferences: Agent and Multi-Agent Systems - Technology and Applications (KES-AMSTA-15), Intelligent Decision Technologies (KES-IDT-15), Intelligent Interactive Multimedia Systems and Services (KES-IIMSS-15), and Smart Education and e-Learning (KES-SEEL-15).

Smart Digital Futures was organised as part of the KES International conference portfolio. For over a decade the mission of KES International has been to provide a professional community, networking and publication opportunities for all those who work in knowledge-intensive subjects. At KES we are passionate about the dissemination, transfer, sharing and brokerage of knowledge. The KES community consists of several thousand experts, scientists, academics, engineers, students and practitioners who participate in KES activities. KES runs conferences in different countries of the world on leading edge topics including Intelligent Systems, Sustainability in Energy and Buildings, Innovation, Knowledge Transfer and Enterprise, and Digital Media. KES provides routes to publication, such as journals, book series, and online publications, both through its own media and in conjunction with major publishers. KES also provides knowledge transfer services and consultancy through the Institute of Knowledge Transfer (IKT).

The aim of Smart Digital Futures was to bring together researchers working at the leading edge of developments in smart systems and intelligent technology theory and applications. This programme contains about 170 papers selected after full peer review by members of the International Programme Committees of the four conferences.

We thank the four keynote speakers for providing informative accounts of the latest research in their areas: Professor Goffredo Haus, Dipartimento di Informatica, Università degli Studi di Milano, Italy; Professor Kazumi Nakamatsu, School of Human Science and Environment, University of Hyogo, Japan; Professor Marcin Paprzycki, Systems Research Institute of the Polish Academy of Sciences, Warsaw, Poland and Professor Jerzy Rutkowski, Silesian University of Technology (SUT), Gliwice, Poland.

We appreciate the efforts of those organising and chairing special sessions, members of the International Programme Committee and reviewers and we thank them. We are grateful to authors for the papers they have contributed to the conference, and to delegates for their attendance and we give them our thanks.

Finally we thank the conference administration for their organisational efforts, and the people of Sorrento for welcoming us to their city.

R.J. Howlett and L.C. Jain  
Smart Digital Futures Conference Series Chairs



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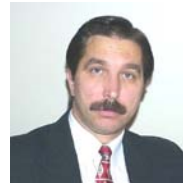
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Prof. Shyan-Ming Yuan	National Chiao Tung University, Computer Science Department, Taiwan
Prof. Larisa Zaiceva	Riga Technical University, Latvia

## Social Events

### Wednesday 17 June

#### *Excursions*

On the evening of Wednesday 17th June, there will be an optional social event.

This will feature a guided tour of the beautiful historical town followed by a selection of drinks and food at one of the most famous restaurants in Sorrento over-looking the stunning views of the Bay of Naples.

Sponsored by Institute for High-Performance Computing and Networking (ICAR) at the University of Naples and KES International, attendance is by advance purchase of a ticket (including drinks / food and a guided tour).

### Thursday 18 June

#### *Gala Dinner*

The conference gala dinner will take place on the evening of Thursday 18 June for those with Full Registration or who have purchased a ticket.

The restaurant "Tasso" is situated at the beginning of the Correale Street. The name "Tasso" comes from the famous poet born in Sorrento well known in the Italian literature.

Totally renovated with elegant and simple rooms, restaurant "Tasso" offers an interesting choice of typical dishes from our region with a little fantasy that make each course more delicious. Dinner will be accompanied by a selection of Italian wines. The restaurant is located in the main centre of Sorrento and it is 15 minutes from the Hilton Sorrento Palace and is also reachable by foot.

## Invited Keynote Talks

### Goffredo Haus

Dipartimento di Informatica, Università degli Studi di Milano, Italy

#### *Interacting with Music by a Multilayer Approach*

**Abstract:** Modeling music by a multilayer approach consists in describing any kind of heterogeneous music contents comprehensively. The main ideas behind the multilayer approach are that music can and should be encoded with symbols independently of the format in which, for example, its audio is delivered, and that, to make it interactive and navigable, this representation must take into account all aspects of music. In a single file, music symbols, printed scores, audio and video tracks (even for every instrument and voice within a piece), computer-driven performances, catalogue metadata, text and graphic contents related to a single music piece are linked and mutually synchronized within the same framework. The format adopted to encode music information is based on the XML international standard known as IEEE 1599; it represents heterogeneous contents in a multilayered structure that supports most common encoding formats and any kind of digital objects for each layer. This talk aims at describing the multilayer approach for the description of heterogeneous music-related contents, and providing a number of demo examples coming from research projects with the partnership of well-known music institutions. Demos show how this approach allow the user to browse, navigate, and interact with music contents in a custom, enhanced, and innovative way.



**Biography:** Prof. Goffredo Haus is known for his research in computer science for music and multimedia.

Since 1985 he has established at the Computer Science Department of the State University of Milan and, since then, directed the Laboratorio di Informatica Musicale (LIM). He is currently the Dean of that Department/

He is full professor in the Computer Science area at the State University of Milan. He teaches Computer Science Applications in Music, Foundations of Computer Science, Multimedia Digital Archives.

He has also directed computer music and multimedia projects of industrial interest, and carried out didactic and other cultural activities, both inside and outside academy. The most relevant are the projects concerning the rescuing of the Musical Archive at Teatro alla Scala in Milan and the Bolshoi Theatre in Moscow.

Prof. Haus published about two hundred scientific papers, and also dozens of other kinds of publications, including a number of books and CD-ROMs concerning computer applications in music.

In 1992, he has been the head of many scientific projects in the frame of the IEEE Computer Society & Standards Association.

**Kazumi Nakamatsu**

School of Human Science and Environment, University of Hyogo, Japan

***Intelligent Decision Technology from the Viewpoint of Reasoning-based Intelligent Systems***

**Abstract:** Intelligent decision technologies have become to constitute an important area in computer science/AI and been applied to various intelligent systems recently. In this lecture, "What is intelligent decision technology?" "How can we implement intelligent decision technologies?" "Future directions of Intelligent Decision Technologies" will be clarified from the viewpoint of a formal reasoning-based intelligent system that can deal with contradiction. Furthermore, it will be introduced that some intelligent decision technologies can be implemented as the formal reasoning-based intelligent systems with small examples.

Paraconsistent annotated logic is well known as a formal logic that can deal with contradiction in the framework of consistent logical systems. One of its logic programs called Extended Vector Annotated Logic Program with Strong Negation (EVALPSN) has been developed for dealing with non-monotonic reasoning such as default reasoning, defeasible reasoning, defeasible deontic reasoning, plausible reasoning, etc. by Kazumi Nakamatsu and applied to conflict resolving, various intelligent control systems such as pipeline valve control, traffic signal control, railway interlocking safety verification, etc. Some of these applications of EVALPSN will be introduced as applications of intelligent decision technology.

Moreover, a special EVALPSN that can deal with a sort of temporal reasoning, before-after relations between processes (time intervals), which has been named bf(before-after)-EVALPSN and its application to real-time process order control will be introduced.



**Biography:** Kazumi Nakamatsu received the Ms. Eng. and Dr. Sci. from Shizuoka University and Kyushu University, Japan, respectively. He is a full Professor at School of Human Science and Environment, University of Hyogo, Japan.

His research interests encompass various kinds of logic and their applications to Computer Science, especially paraconsistent annotated logic programs and their applications. He has developed some paraconsistent annotated logic programs called ALPSN(Annotated Logic Program with Strong Negation), VALPSN(Vector ALPSN), EVALPSN(Extended VALPSN) and bf-EVALPSN (before-after EVALPSN) recently, and applied them to various intelligent systems such as a safety verification based railway interlocking control system and process order control. He is an author of over 150 papers and 20 book chapters, and 10 edited books published by prominent publishers.



Kazumi Nakamatsu has chaired various international conferences, workshops and invited sessions, and he has been a member of numerous international program committees of workshops and conferences in the area of Computer Science. He serves as Editor-in-Chief of the International Journal of Reasoning-based Intelligent Systems by Inderscience Publishers(UK) and an editorial board member of many international journals. He has contributed numerous invited lectures at international workshops, conferences, and academic organizations. He also is a recipient of some conference and paper awards. He is a member of Japan AI Society, IEEE, etc.

**Marcin Paprzycki**

Systems Research Institute of the Polish Academy of Sciences, Warsaw, Poland

***Software Agents as Resource Brokers in Grid***

**Abstract:** Years of middleware development have resulted in creation of multiple platforms for Grid computing (e.g. gLite, Globus, EGEE, Unicore, etc.). Furthermore, an attempt is currently under way to combine them within a single meta-system (the European Middleware Initiative; EMI). However, practical experiences show that neither of these approaches fully succeeds with the users.

The aim of the presentation is to outline our attempt at combining software agents with semantic technologies for development of a different meta-level computational Grid middleware. In our approach, software agents use their "semantic brain" to manage the Grid "brawn" (to reference a seminal paper: I. Foster, C. Kesselman, N. Jennings, Brain Meets Brawn: Why Grid and Agents Need Each Other; 2004).



**Biography:** Marcin Paprzycki (Senior Member of the ACM, Senior Member of the IEEE, Senior Fulbright Lecturer, IEEE CS Distinguished Visitor) has received his M.S. Degree in 1986 from Adam Mickiewicz University in Poznan, Poland, his Ph.D. in 1990 from Southern Methodist University in Dallas, Texas and his Doctor of Science Degree from Bulgarian Academy of Sciences in 2008. His initial research interests were in high performance computing and parallel computing, high performance linear algebra in particular. Over time they

evolved toward distributed systems and Internet-based computing; in particular, agent systems. He has published more than 300 research papers and was invited to Program Committees of over 500 international conferences. He is on editorial boards of 10 journals.

**Jerzy Rutkowski**

Silesian University of Technology (SUT), Gliwice, Poland

***Flip Teaching Approach to Smart Education - Principles and Guidelines***

**Abstract:** Today, the act of learning itself is no longer seen as simply a matter of information transfer, but rather as a process of dynamic participation in which students cultivate new ways of thinking, migrate toward Self Directed Learning (SDL) experiences on computer and Internet. They want to learn in the classroom the same way they interact outside of it and smart education tools make exploring lessons and collaborating on solutions a simple, easy experience that students immediately recognize and adopt. On the other hand, these tools are easy to use and teachers can quickly incorporate them into their teaching to transform student learning and increase engagement. Dynamic development of smart education tools enable development of new instructional methods, support of SDL by different e-materials, e.g. video-recordings. Such recordings create podcasts and screencasts for playback on PCs and portable media players and enable introduction of a new teaching method, based on SDL principles, called Flip Teaching. Basics of this approach are presented. Then, development of flipped classroom, both learning content and assessment program, is discussed, based on Electric Circuit Analysis course case study. Finally, findings of this case study are discussed, resulting guidelines are given. A commonly asked question: "Is the flipped classroom more effective than the traditional classroom" has been replaced by the following one: "What are the barriers to Flip Teaching development and what can be done to break these barriers, improve the Flip Teaching effectiveness".



**Biography:** Professor Jerzy Rutkowski is currently the Head of Circuit & Signal Theory Division - SUT. Formerly, he was the Dean of the Faculty of Automatics, Electronics & Computer Science, and then, the Vice-Rector for International Cooperation - SUT. He is a member of numerous scientific and educational committees and boards, among others: the Committee of Electronics & Telecommunication of the Polish Academy of Science and SEFI (European Society for Engineering Education) Board of Directors. Professor Jerzy Rutkowski is author and coauthor of more than one hundred internationally recognized scientific papers, he's today research interests are located in the field of Technology Enhanced Education.

## Conference Timetable

Wednesday 17 June

		Nettuno 4	Nettuno 2	Nettuno 5	Nettuno 6	Nettuno 1
8.00-9.00	Registration Hilton Sorrento Palace					
9.00-9.30		<b>Opening Ceremony</b>  <b>Prof. Antonino Mazzeo, University of Naples "Federico II", President of CERICT – ICT Centre of Campania Region</b>  <b>Prof Robert J. Howlett, Bournemouth University &amp; Executive Chair KES International</b>  <b>Prof Lakhmi C. Jain, University of South Australia &amp; Founder KES International</b>				

		Nettuno 4	Nettuno 2	Nettuno 5	Nettuno 6	Nettuno 1
9.30-10.30		IDT Keynote Speaker  <b>Professor Kazumi Nakamatsu</b> <i>Intelligent Decision Technology from the Viewpoint of Reasoning-based Intelligent Systems</i>				
10.30-11.00	Coffee					
11.00-13.00		<b>IDT-1</b>  IDT-IS02: Theory and applications of forecasting  Chair: Dr Wojciech Froelich	<b>SEEL-1</b>  Smart Education  Chair: Professor Vladimir Uskov	<b>IIMSS-1</b>  IIMSS-IS01(a): Intelligent Video Processing and Transmission Systems  Chair: Margarita Favorskaya	<b>AMSTA-1</b>  AMSTA-IS05 - Business Model Innovation and Disruptive Technologies  Chair: Dr Yun-Heh Chen-Burger	
13.00-14.00	Lunch					
14.00-15.00		SEEL Keynote Speaker  <b>Professor Jerzy Rutkowski</b> <i>Flip Teaching Approach to Smart Education – Principles and Guidelines</i>				

		Nettuno 4	Nettuno 2	Nettuno 5	Nettuno 6	Nettuno 1
15.00-15.30	Coffee					
15.30-17.30		<b>IDT-2</b> IDT-IS10: Reasoning-based Intelligent Systems & IDT-IS03: Interdisciplinary Approaches in Business Intelligence Research and Practice Chairs: Prof Kazumi Nakamatsu & Prof Ivan Lukoviæ	<b>SEEL-2</b> Smart Educational Technology Chair: Yann Le Ru	<b>IIMSS-2</b> IIMSS-IS01(b): Intelligent Video Processing and Transmission Systems Chair: Margarita Favorskaya	<b>AMSTA-2</b> AMSTA-IS06 - Serious Game and Business Intelligence through Agent-based Modelling Chair: Prof. Hiroshi Takahashi	
To Be Notified	Walking Tour of Sorrento (Optional)					

## Conference Schedule

Thursday 18 June

		Nettuno 4	Nettuno 2	Nettuno 5	Nettuno 6	Nettuno 1
8.00-8.30	Registration					
8.30-9.00						
9.00-11.00		<b>AMSTA-3</b>  AMSTA General Track - Agent Based Algorithms, Simulations and Organisations  Chair: Prof Mario Kusek	<b>IDT-3</b>  IDT-IS07: Intelligent Methods for Eye Movement Data Processing and Analysis  Chair: Dr Pawel Kasprowski	<b>IIMSS-3</b>  IIMSS-IS02: Autonomous Systems  Chair: Milan Simic	<b>SEEL-3</b>  Smart e-Learning - 1  Chair: Geraint Lang	<b>IDT-4</b>  IDT-IS01: Advances of Soft Computing in Industrial and Management Engineering  Dr Shing Chiang Tan
11.00-11.30	Coffee					
11.30-12.30		<b>AMSTA Keynote Speaker</b> <b>Profssor Marcin Paprzycki</b> <i>Software Agents as Resource Brokers in Grid</i>				
12.30-13.30	Lunch					

		Nettuno 4	Nettuno 2	Nettuno 5	Nettuno 6	Nettuno 1
13.30-15.30		<b>AMSTA-4</b>  AMSTA General Track - Mobile Agent Security and Multi-Agent Systems IS03 Learning paradigms and Applications: Agent Based Approach  Chair: Prof Mirjana Ivanovic	<b>IDT-5</b>  IDT-IS09: Specialized Decision Techniques for Data Mining, Transportation and Project Management  Chairs: Dr Ireneusz Czarnowski & Dr Clara Pizzuti	<b>IIMSS-4</b>  IIMSS General Track (a)  Chair: Giuseppe De Pietro	<b>SEEL-4</b>  Smart Teaching  Chair: Blanka Kilmova	<b>IDT-6</b>  IDT-IS06: Decision Making Theory  Prof Eizo Kinoshita
	15.30-16.00	Coffee				
16.00-18.00		<b>AMSTA-5</b>  AMSTA-IS07 - The design and implementation of Intelligent Agents and Multi-Agent Systems  Chair: Dr Arnulfo Garza	<b>IDT-7</b>  IDT-IS11: Pattern Recognition for Decision Making Systems & IDT-IS05: Intelligent Decision Making Support for Big Data Analytics  Chairs: Dr Paolo Crippa	<b>IIMSS-5</b>  IIMSS General Track (b)  Chair: Giuseppe De Pietro	<b>SEEL-5</b>  Smart Training Related Topics  Chair: Prof. Danguole Rutkauskeine	<b>SEEL-6</b>  Smart e-Learning - 2  Chair: Dr. Natalia Dneprovskaya
	Conference Banquet					



## Conference Schedule

Friday 19 June

		Nettuno 4	Nettuno 2	Nettuno 5	Nettuno 6	Nettuno 1
8.00-8.30	Registration					
8.30-9.00						
9.00-11.00		<b>IIMSS-6</b>  IS03: Innovative Information Services for Advanced Knowledge Activity  Chair: Koichi Asakura	<b>IDT-8</b>  IDT General Track (a)  Chair: Prof Lakhmi C. Jain	<b>AMSTA-6</b>  IS01 - Agent-Based Modelling and Simulation  Chair: Dr Roman Sperka	<b>SEEL-7</b>  Smart Teachers' Education - 1  Chair: Dr Marina Lapenok	
11.00-11.30	Coffee					
11.30-12.30		<b>IIMSS Keynote Speaker</b> <b>Professor Goffredo Haus</b> <i>Interacting with Music by a Multilayer Approach</i>				
12.30-13.30	Lunch					

	Nettuno 4	Nettuno 2	Nettuno 5	Nettuno 6	Nettuno 1
<b>13.30-15.30</b>	<b>IDT-9</b> IDT General Track (b) Chair: Prof Gloria Wren	<b>IDT-10</b> IDT General Track (c) Chair: Prof Lakhmi Jain	<b>AMSTA-7</b> IS04 - Anthropic-Oriented Computing Chair: Prof Manuel Mazzara	<b>SEEL-8</b> Smart Teachers' Education - 2 Chair: Dr Marina Lapenok	
<b>15.30-16.00</b>	Closing Ceremony				
<b>16.00-16.30</b>					

## AMSTA Paper Presentations

AMSTA-1

Weds 17 June, 11.00-13.00

Room: Nettuno 6

### ***AMSTA-IS05: Business Model Innovation and Disruptive Technologies***

Chair: Dr Yun-Heh Chen-Burger

ams15-010 Bitcoin: Bubble or Blockchain

Dr Phil Godsiff

ams15-027 A Hybrid On-line Topic Groups Mining Platform

Mr. Cheng-Lin Yang, Dr. Yun-Heh Chen-Burger

ams15-031 On Autonomic Platform-as-a-Service: Characterisation and Conceptual Model

Dr. Rafael Tolosana-Calasanz, Dr. José Bañares, Professor José Colom

ams15-032 Disruptive Innovation: A Dedicated Forecasting Framework

Ms Sanaa Diab, Dr John Kanyaru, Dr Hind Zantout

ams15-033 Enabling Data Subjects to Remain Data Owners

Prof Nick Taylor, Ms Eliza Papadopoulou, Mr Alex Stobart, Prof M Williams

ams15-059 A study of eBusiness models leveraging technology innovation

Ms Urszula Doloto, Dr. Yun-Heh Chen-Burger

AMSTA-2

Weds 17 June, 15.30-17.30

Room: Nettuno 6

***AMSTA-IS06: Serious Game and Business Intelligence through Agent-based Modelling***

Chair: Prof. Hiroshi Takahashi

ams15-023 An Evaluation Model for Order-decision Methods of Contents in Information-providing Sites

Mr. Masato Mori, Mr. Setsuya Kurahasi

ams15-025 Analysis of the Network Effects on Obesity Epidemic

Graduate student Kazumoto Takayanagi, Associate Professor Setsuya Kurahashi

ams15-030 A Health Policy Simulation Model of Smallpox and Ebola Haemorrhagic Fever

Dr. Setsuya Kurahashi, Prof. Takao Terano

ams15-058 Analyzing the Influence of Market Conditions on the Effectiveness of Smart Beta

Prof. Hiroshi Takahashi

AMSTA-3

Thurs 18 June, 9.00-11.00

Room: Nettuno 4

***AMSTA General Track (a): Agent Based Algorithms, Simulations and Organisations***

Chair: Prof Mario Kusek

ams15-011 Combining Process Simulation and Agent Organizational Structure  
Evaluation in order to Analyze Disaster Response Plans

Mr. Thanh Le, Prof. Chihab HANACHI, Dr. Tuong Vinh HO, Dr. Serge STINCKWICH

ams15-016 Evaluation of organization in multiagent systems for fault detection and  
isolation

Dr Faten Ben Hmida, Dr Wided Lejouad Chaari, Pr Moncef Tagina

ams15-017 The Application of Co-evolutionary Genetic Programming and TD(1)  
Reinforcement Learning in Large-Scale Strategy Game VCM1

Dr. Rafal Drezewski, MSc Lukasz Wilisowski

ams15-019 Agent-Based Neuro-Evolution Algorithm

Dr. Rafal Drezewski, Dr. Aleksander Byrski, Prof. Krzysztof Cetnarowicz, Eng. Grzegorz  
Dziuban, MSc. Szymon Martynuska

ams15-020 Towards Designing Android Faces after Actual Humans

Mr. Evgenios Vlachos, Professor Henrik Schärfe

ams15-015 Towards a Distributed Multiagent Travel Simulation

Mr Matthieu Mastio, Pr Omer Rana, Dr Mahdi Zargayouna

AMSTA-4

Thurs 18 June, 13.30-15.30

Room: Nettuno 4

***AMSTA General Track (b): Mobile Agent Security and Multi-Agent Systems***

Chair: Prof Mirjana Ivanovic

ams15-014 MASIR : A Multi-agent System for Real-time Information Retrieval from Microblogs during Unexpected Events

Phd Student Imen Bizid, Professor Patrice Boursier, Professor Sami Faiz, Professor Jacques Morcos

ams15-021 Security of Mobile Agent Platforms Using Access Control and Cryptography

Mrs Hind IDRISSE, Mr Arnaud REVEL, Mr El Mamoun SOUIDI

ams15-029 Data Filtering in Context-Aware Multi-Agent System for Machine-to-Machine Communication

MSc Pavle Skocir, Prof. Gordan Jezic, Prof. Mario Kusek, MSc Hrvoje Maracic

***AMSTA-IS03: Learning paradigms and Applications: Agent Based Approach***

Chair: Prof Mirjana Ivanovic

ams15-012 Evaluating organizational structures for supporting Business Process Reengineering: Agent based approach

Phd student abdelkafi Mahdi, Associate professor bouzguenda Lotfi

ams15-022 Personal Assistance Agent in Programming Tutoring System

PhD Boban Vesin, PhD Zoran Budimac, PhD Mirjana Ivanović, PhD Aleksandra Klačnja-Milićević

ams15-040 Agent-Based Approach for Game-Based Learning Applications: Case Study in Agent-Personalized Trend in Engineering Education

Dr Dejan Rancic, Dr Kristijan Kuk, Dr Olivera Pronic-Rancic, Dr Dragan Randjelovic

AMSTA-5

Thurs 18 June, 16.00-18.00

Room: Nettuno 4

***AMSTA-IS07: The design and implementation of Intelligent Agents and Multi-Agent Systems***

Chair: Dr Arnulfo Garza

ams15-013 Keyword Search in P2P Relational Databases

Prof. Tadeusz Pankowski

ams15-038 Social Multi-Agent System searching empathy between primary emotions

Dr Arnulfo Alanis

ams15-039 Recognition of primary emotions using the paradigm of intelligent agents for the recognition of subtle facial expressions

Engineer Enrique Aguirre

ams15-042 Assessment and Intervention with Wii Fit in the elderly

Ph. D. Lenin-Guillermo Lemus-Zuñiga, Ph. D. Arnulfo Alanís, Doctoral Student Natalia Fernández-Pintos, Ph. D. José Montañana-Aliaga, Ph. D. Esperanza Navarro-Pardo

ams15-043 A Multiagent System Proposal for 30 Day Readmission Problem Management

M.Sc. Miguel Mateo Pla, PhD Lenin Lemus-Zuñiga, PhD Jose Montañana, PhD Julio Pons Terol, PhD Salvador Tortajada

AMSTA-6

Fri 19 June, 9.00-11.00

Room: Nettuno 5

***AMSTA-IS01: Agent-Based Modelling and Simulation***

Chair: Dr Roman Sperka

ams15-001 Multi-objective Optimization for Clustering Microarray Gene Expression Data - A Comparative Study

Dr. Muhammad Marwan Muhammad Fuad

ams15-003 Group Control Strategy for a Fleet of Intelligent Vehicles-Agent Performing Monitoring

Professor Viacheslav Abrosimov

ams15-006 Economic Demand Functions in Simulation: Agent-based vs. Monte Carlo Approach

Dr. Roman Sperka

ams15-024 Agent-Based Simulation Model of Sexual Selection Mechanism

Dr. Rafal Drezewski

ams15-034 Core of n-Person Transferable Utility Games with Intuitionistic Fuzzy Expectations

Mrs. Elena Mielcova

ams15-041 Self-learning Genetic Algorithm for Neural Network Topology Optimization

Ph.D. Radomir Perzina



AMSTA-7

Fri 19 June 13.30-15.30

Room: Nettuno 5

***AMSTA-IS04: Anthropic-Oriented Computing***

Chair: Prof Manuel Mazzara

ams15-007 Human-Related Factors in Knowledge Transfer: A Case Study

Dr. Sergey Zykov

ams15-008 Enterprise Applications as Anthropic-Oriented Systems: Patterns and Instances

Dr. Sergey Zykov

ams15-035 Fault Detection in WSNs - An Energy Efficiency Perspective Towards Human-Centric WSNs

Prof Dragoni Nicola, Mr Charalampos Orfanidis, Dr Yue Zhang

ams15-046 Thinking Lifecycle as an implementation of machine understanding in software maintenance automation domain

Mr. Alexander Toshev, Mr. Maxim Talanov

ams15-049 Towards Anthro-po-inspired Computational Systems: the P^3 Model

Dr. Max Talanov, Dr. Michael Bridges, Prof. Salvatore Distefano, Prof. Manuel Mazzara, Dr. Marat Minlebaev, Prof. Jordi Vallverdu

## **IDT Paper Presentations**

IDT-1

Weds 17 June, 11.00-13.00

Room: Nettuno 4

### ***IDT-IS02: Theory and applications of forecasting***

Chair: Dr Wojciech Froelich

idt15-006 Dealing with Seasonality While Forecasting Urban Water Demand

Dr Wojciech Froelich

idt15-039 Short Term Load Forecasting for Residential Buildings - An Extensive Literature Review

Ms. Carola Gerwig

idt15-042 GEFCOM 2014 - Probabilistic Electricity Price Forecasting

Mr. Gergo Barta

idt15-060 Probabilistic Forecasting of Solar Power: An Ensemble Learning Approach

Mr. Azhar Ahmed Mohammed

idt15-063 Application of Bayesian Networks to the Forecasting of Daily Water Demand

Dr Ewa Magiera

idt15-067 Fuzzy Cognitive Maps and Multi-step Gradient Methods for Prediction: Applications to Electricity Consumption and Stock Exchange Returns

Prof Elpiniki Papageorgiou

idt15-071 Nearest Neighbour Algorithms for Forecasting Call Arrivals in Call Centers

Dr Sandjai Bhulai

IDT-2

Weds 17 June, 15.30-18.00

Room: Nettuno 4

***IDT-IS10: Reasoning-based Intelligent Systems***

Chair: Prof Kazumi Nakamatsu

idt15-059 Propositional Algebra P1

Doctor Jair Abe

idt15-061 An effective approach for text mining based on noun phrases

D.Sc. Marcello Pinheiro

idt15-062 Journal Impact Factor Revised with Focused View

Dr Tetsuya Nakatoh

idt15-073 A Cloud-based Vegetable Production and Distribution System

Dr. Alireza Ahrary

***IDT-IS03: Interdisciplinary Approaches in Business Intelligence Research and Practice (IABIRP 2015)***

Chair: Prof Ivan Lukoviæ

idt15-018 Leveraging Textual Information for Improving Decision-Making in the Business Process Lifecycle

Prof. Dr. Rainer Schmidt

idt15-052 Strengthening the rationale of recommendations through a hybrid explanations building framework

Prof. Nikos Karacapilidis

idt15-064 Human Friendly Associative Classifiers for Early Childhood Caries

Mr Vladimir Ivančević

IDT-3

Thurs 18 June, 9.00-11.00

Room: Nettuno 2

***IDT-IS07: Intelligent Methods for Eye Movement Data Processing and Analysis***

Chair: Dr Pawel Kasproski

idt15-027 Design requirements to integrate eye trackers in simulation environments:  
aeronautical use case

Dr Jean-Paul Imbert

idt15-030 Massive-Scale Gaze Analytics: Exploiting High Performance Computing  
Professor Andrew Duchowski

idt15-046 Eye Movement Signal Processing: A Modern Comprehensive Statistical  
Foundation and Algorithm

Dr. Subhadeep Mukhopadhyay

idt15-048 Improving Model-based Mobile Gaze Tracking

Researcher Miika Toivanen

idt15-049 Dynamic-Programming-based Method for Fixation-to-Word Mapping

Mr. Akito Yamaya

idt15-050 Eye Movements? Data Processing for Ab Initio Military Pilot Training

PhD Graduate Student Emilien Dubois

IDT-4

Thurs 18 June, 9.00-11.00

Room: Nettuno 1

***IDT-IS01: Advances of Soft Computing in Industrial and Management Engineering***

Chair: Dr Shing Chiang Tan

idt15-021 Automatic Image Classification for the Urinoculture Screening

Mr. Paolo Andreini

idt15-023 Towards an effective querying of distributed database

Researcher Abir Belhadj Kacem

idt15-033 Building A Sensitivity-Based Portfolio Selection Models

Doctor Huiming Zhang

idt15-034 Strategic Decision-making from the Perspective of Fuzzy Two-echelon

Supply Chain Model

Professor Junzo Watada

idt15-056 A Bilevel Synthetic Winery System for Balancing Profits and Perishable  
Production Quality

Haiyu Yu

idt15-057 Evolving an Adaptive Artificial Neural Network with a Gravitational Search  
Algorithm

Dr. Shing Chiang Tan

IDT-5

Thurs 18 June, 13.30-17.30

Room: Nettuno 2

***IDT-IS09: Specialized Decision Techniques for Data Mining, Transportation and Project Management***

Chairs: Dr Ireneusz Czarnowski & Dr Clara Pizzuti

idt15-031 Distance-based ensemble online classifier with kernel clustering

Prof Joanna Jedrzejowicz

idt15-040 Comparing Hybrid Metaheuristics for the Bus Driver Rostering Problem

Eng. Vítor Barbosa

idt15-051 An Experimental Study of Scenarios for the Agent-based RBF Network Design

Prof. Ireneusz Czarnowski

idt15-065 Reinforcement Learning Strategy for Solving the MRCPSPP by a Team of Agents

Dr Ewa Ratajczak-Ropel

idt15-070 Effective Stopping Rule for Population-based Cooperative Search Approach to the Vehicle Routing Problem

Dr. Dariusz Barbucha

idt15-058 FCA for Users' Social Circles Extension

PhD student guesmi soumaya

IDT-6

Thurs 18 June, 13.30-17.30

Room: Nettuno 1

***IDT-IS06: Decision Making Theory***

Chair: Prof Eizo Kinoshita

idt15-017 Using Super Pairwise Comparison Matrix for Calculation of the multiple dominant AHP

Prof. Takao Ohya

idt15-025 The improvement of pairwise comparison method of the alternatives in the AHP

Professor Kazutomo Nishizawa

idt15-026 A Study on Composition of Elements for AHP

Ma Takafumi Mizuno

idt15-028 A Note on the Relationship between the Consistency Index and the Goodness of Fit of Weight to Human Perception

Professor Yuji Sato

idt15-036 Probabilistic Weighted CP-nets

Student Sleh ElFidha

IDT-7

Thurs 18 June, 16.00-18.00

Room: Nettuno 2

***IDT-IS11: Pattern Recognition for Decision Making Systems***

Chair: Dr Paolo Crippa

idt15-066 A Rule Based Framework for Smart Training Using sEMG Signal

Dr. Paolo Crippa

idt15-068 Artificial Intelligence Based Techniques For Rare Patterns Detection in the Industrial Field

Dr Marco Vannucci

idt15-069 Distributed speech recognition for lighting system control

Dr. Laura Falaschetti

idt15-072 Detection of Variations in Holter ECG recordings based on Dynamic Cluster Analysis

Mr. Matthias Hermann

idt15-011 Argument Quality or Peripheral Cues: What Makes an Auction Deal Successful in eBay?

Ph. D. Min Jung Ko

idt15-037 SyLaR - The system for logic and automated reasoning for situation management decision support systems.

Dr Erika Matsak



IDT-8

Fri 19 June, 9.00-11.00

Room: Nettuno 2

***IDT General Track (a)***

Chair: Prof Lakhmi C.Jain

idt15-004 Comparison of Classical Multi-Criteria Decision Making Methods with Fuzzy Rule-based Methods on the Example of Investment Projects Evaluation

PhD Bogdan Rębiasz

idt15-007 Reasoning and Decision Making in an Inconsistent World. Labeled Logical Varieties as a Tool for Inconsistency Robustness.

Dr. Cornelis de Vey Mestdagh

idt15-008 A Theoretical Framework for Trusted Communication

Prof.Dr. Daocheng Hong

idt15-009 Decision making support technique based on territory wellbeing estimation

Dr. Tatiana Penkova

idt15-010 Possibilistic Very Fast Decision Tree for Uncertain Data Streams (PossCVFDT)

PhD Student Mohamed Hamroun

idt15-035 A Survey on Expert Systems for Diagnosis Support in the Field of Neurology

M.Sc. Mirco Josefiok

IDT-9  
Fri 19 June, 13.30-15.30  
Room: Nettuno 4

***IDT General Track (b)***  
Prof Gloria Wren

idt15-012 Mining Historical Social Issues  
Mr. Yasunobu Sumikawa

idt15-013 The eye tracking methods in user interfaces assessment  
Dr Pawel Kasprowski

idt15-014 The eye movement data storage ? checking the possibilities  
Dr Pawel Kasprowski

idt15-016 Using Non-Calibrated Eye Movement Data To Enhance Human Computer Interfaces  
Dr Pawel Kasprowski

idt15-043 A simulation approach to select interoperable solutions in Supply Chain dyads  
PhD Student Pedro Espadinha-Cruz

IDT-10

Fri 19 June, 13.30-15.30

Room: Nettuno 2

***IDT General Track (c)***

Chair: Prof Lakhmi C. Jain

idt15-019 Performance Evaluation of Academic Research Activity in a Greek University: A DEA approach

MSc Gregory Koronakos

idt15-024 Using Argumentation to Develop a Set of Rules for Claims Classification

Mr Jann Mueller

idt15-044 QoS-aware Web Service Composition Using Quantum Inspired Particle Swarm Optimization

Mr. Chandrashekar Jatoth

idt15-045 Fitness Metrics for QoS-aware Web Service Composition using Metaheuristics

Mr. Chandrashekar Jatoth

idt15-054 Capacity Planning in Non-Uniform Depth Anchorages

Dr. Vural Aksakalli

## IIMSS Paper Presentations

IIMSS-1

Weds 17 June, 11.00-13.00

Room: Nettuno 5

### ***IIMSS-IS01(a): Intelligent Video Processing and Transmission Systems***

Chair: Margarita Favorskaya

ims15-002 Mersenne-Walsh Matrices for Image Processing

Nikolay Balonin, Anton Vostrikov, Mikhail Sergeev

ims15-033 Frequency Characteristics for Video Sequences Processing

Andrei Bogoslovsky, Irina Zhigulina, Igor Maslov, Tatiana Mordovina

ims15-003 Expansion of the Quasi-Orthogonal Basis to Mask Images

Anton Vostrikov, Mikhail Sergeev

ims15-010 Performance Analysis of Prediction Methods for Lossless Image Compression

Nickolay Egorov, Dmitriy Novikov, Marat Gilmutdinov

ims15-009 Non-Stationary Correlation Noise Modeling for Transform Domain Wyner-Ziv Video Coding

Anton Veselov, Boris Filippov, Victor Yastrebov, Marat Gilmutdinov

IIMSS-2

Weds 17 June, 15.30-17.30

Room Nettuno 5

***IIMSS-IS01(b): Intelligent Video Processing and Transmission Systems***

Chair: Margarita Favorskaya

ims15-017 Fusion of Airborne LiDAR and Digital Photography Data for Tree Crowns Segmentation and Measurement

Margarita Favorskaya, Anastasia Tkacheva, Igor M. Danilin, Evgeny M. Medvedev

ims15-013 Digital Gray-Scale Watermarking Based on Biometrics

Margarita Favorskaya, Eugenia Oreshkina

ims15-005 New Non-intrusive Speech Quality Assessment Algorithm for Wireless Networks

Akmal Akmalhodzhaev, Alexander Kozlov

ims15-004 Block-Permutation LDPC Codes for Distributed Storage Systems

Evgenii Krouk, Andrei Ovchinnikov

ims15-008 Estimation of the Mean Message Delay for Transport Coding

Dmitrii Malichenko, Evgenii Krouk

IIMSS-3

Thurs 18 June, 9.00-11.00

Room: Nettuno 5

***IIMSS-IS02: Autonomous Systems***

Chair: Milan Simic

ims15-047 Sustainable Flat Ride Suspension Design

Hormoz Marzbani, Milan Simic, M.Fard, Reza N. Jazar

ims15-043 Better Road Design for autonomous vehicles Using Clothoids

Hormoz Marzbani, Milan Simic, M.Fard, Reza N. Jazar

ims15-035 Towards Formal Modelling of Autonomous Systems

Maria Spichkova, Milan Simic

ims15-045 Developing a Navigation System for Mobile Robots

Jeffery Young, Mohamed Elbanhawi, Milan Simic

ims15-032 Experimental Flight Test for Autonomous Station-Keeping of a Lighter-Than-Air Vehicle

Cees Bil, Jeroen Zegers, Leroy Hazeleger, Liuping Wang, Milan Simic

IIMSS-4

Thurs 18 June, 13.30-15.30

Room: Nettuno 5

***IIMSS General Track (a)***

Chair: Giuseppe De Pietro

ims15-023 Touchless target selection techniques for wearable augmented reality systems

Nadia Brancati, Giuseppe Caggianese, Maria Frucci, Luigi Gallo, Pietro Neroni

ims15-024 Improving user experience of cultural environment through IoT: the Beauty or the Truth case study

Angelo Chianese, Francesco Piccialli

ims15-025 A multimedia summarizer integrating text and images

Antonio d'Acierno, Francesco Gargiulo, Vincenzo Moscato, Antonio Penta, Fabio Persia, Antonio Picariello, Carlo Sansone, Giancarlo Sperli

ims15-026 c-Space: A Mobile Framework for the Visualization of Spatial-temporal 3D Models

Bruno Simoes, Matteo Marangon, Raffaele De Amicis

ims15-015 The Method to Verify Facial Shape Model

Seonwoon Kim, Seokhoon Kang

ims15-016 Effective Visualization of a Big Data Banking Application

Luigi Coppolino, Salvatore D'Antonio, Luigi Romano, Ferdinando Campanile, Alexandre Valle de Carvalho

IIMSS-5

Thurs 18 June, 16.00-18.00

Room: Nettuno 5

***IIMSS General Track (b)***

Chair: Giuseppe De Pietro

ims15-031 A study about the comprehensibility of pictograms for Order Picking processes with disabled people and people with altered performance

Peter Kurtz, Georg Kruell, Thomas Heidenreich, Thomas Hoerz

ims15-019 Mining Popular Travel Routes from Social Network geo-tagged data

Carmela Comito, Deborah Falcone, Domenico Talia

ims15-020 Enhancing Workspace Composition by Exploiting Linked Open Data as a Polymorphic Data Source

Giuseppe Desolda

ims15-006 Benjamin Franklin's Decision Method Is Acceptable and Helpful with a Conversational Agent

Daniel Maurer, Karsten Weihe

ims15-030 Towards Model-Driven assessment of Clinical Processes

Flora Amato, Giovanni Cozzolino, Alessandra D'Alessio, Stefano Marrone, Nicola Mazzocca, Gianluca Mele, Roberto Nardone

ims15-022 A Monitoring System for the Recognition of Sleeping Disorders in Patients with Cognitive Impairment Disease

Antonio Coronato, Giovanni Paragliola



IIMSS-6

Fri 19 June, 9.00-11.00

Room: Nettuno 4

***IIMSS-IS03: Innovative Information Services for Advanced Knowledge Activity***

Chair: Koichi Asakura

ims15-046 Experimental Evaluation of Multi-Key Content-Based Image Retrieval  
Hideki Sato, Shigemi Nagata

ims15-042 A Simple Medium Access Scheme based on Spread Spectrum Suitable for  
Wireless Ad Hoc Networks  
Shiori Watanabe, Yukihiro Kamiya

ims15-048 Implementation of tree-based data collection scheme for Arduino-  
compatible board  
Katsuhiko Naito, Kento Nakanishi, Kazuo Mori, Hideo Kobayashi

ims15-036 Analysis of Driving Behaviors at Roundabout Intersections by using Driving  
Simulator  
Naoto Mukai, Misako Hayashi

ims15-034 Is Experience of Novel Reading Useful to Compose Technical Papers?  
Toyohide Watanabe, Koichi Asakura

ims15-044 A Movement Algorithm for Evacuee Agents in Disaster Simulators:  
Towards the Development of Evacuation Guidance Systems based on Ant Colony  
Systems using MANET  
Koichi Asakura, Toyohide Watanabe

## SEEL Paper Presentations

SEEL-1

Weds 17 June, 11.00-13.00

Room: Nettuno 2

### ***Smart Education***

Chair: Professor Jerzy Rutkowski

seel15-000 Introduction to Smart Education and E-Learning 2015

Dr., Prof. Vladimir Uskov

seel15-070 The Ontology of Next Generation Smart Classrooms

Dr., Prof. Vladimir Uskov, Graduate Dean Jeffrey Bakken, Graduate Student Akshay Pandey

seel15-037 Assessment in Smart Learning Environment - A Case Study Approach

Mrs Blanka Klimova

seel15-029 Three dimensions of the Smart Education

Prof. Ekaterina Yankovskaya, prof. Natalia Dneprovskaya, prof. Vladimir Tikhomirov

seel15-059 To Flip or Not To Flip: A Critical Interpretive Synthesis of Flipped Teaching

Dr Virginia Franqueira, Mr Peter Tunnicliffe

SEEL-2

Weds 17 June, 15.30-17.30

Room: Nettuno 2

***Smart Educational Technology***

Chair: Dr. Jean-Pierre Gerval

seel15-022 Smart Study: Pen and Paper-Based E-Learning

Mr. Dieter Van Thienen, Prof. dr. Olga De Troyer, Mr. Pejman Sajjadi

seel15-047 Enhance Teleteaching Videos with Semantic Technologies

Dipl.-Inf. Matthias Bauer, M.Sc. Martin Malchow, Prof. Dr. Christoph Meinel

seel15-001 Tests generation oriented web-based automatic assessment of programming assignments

Mr Yann LE RU, Dr Michaël Aron, Dr Jean-Pierre Gerval, Dr Thibault Napoleon

seel15-013 Living Books and the Advanced Network Technologies for Education in a Technical University

Dr. Nikolay Balonin, Dr. Yulia Antokhina, Dr. Mikhail Sergeev

seel15-042 Just Give Me A Hint!: An Alternative Testing Approach for Simultaneous Assessment and Learning

Dr. Jerry Schnepf, Dr. Christian Rogers

seel15-061 M-Model: Design and Tutoring of an On-Line Homework System for Engineering Mechanics

Professor Edward Anderson

SEEL-3

Thurs 18 June, 9.00-11.00

Room: Nettuno 6

***Smart e-Learning – 1***

Chair: Geraint Lang

seel15-045 Game mechanics used for achieving better results of massive online courses

Mr. Alexander Pershin, PhD Matvey Kazakov, PhD Liubov Lisitsyna

seel15-015 Maintaining online engagement in e-Learning through games based learning and gamification techniques

Mr Geraint Lang

seel15-030 Learning by doing history with smart historical gaming

Dr. Brian Slator, Mr. Otto Borchert, Mr. Guy Hokanson

seel15-044 E-Learning Tools for a Software Platform

Professor Dumitru Dan Burdescu

seel15-051 Transferring Smart E-Learning Strategies into Online Graduate Courses

Assistant Professor Laurie Ruberg

seel15-018 Intra-domain User Model for Content Adaptation

Mr Anwar Hussain, Mr Muhammad Abu Ul Fazal, Mr Muhammad Shuaib Karim

SEEL-4

Thurs 18 June, 13.30-15.30

Room: Nettuno 6

***Smart Teaching***

Chair: Blanka Kilmova

seel15-040 Study materials in smart learning environment - a comparative study  
Mrs Blanka Klimova, Mrs Ivana Simonova

seel15-041 Investment Competitions on the Current Local Scene from Students ´  
Perspective - Case study  
Ing. Ph.D. Libuse Svobodova, Ing. Ph.D. Miloslava Cerna

seel15-066 The usefulness of the virtual speaking head, as well as 3D visualization  
tools in the new communication, teaching, energy control and presentation  
technologies is almost unlimited.  
Mgr. Eva Pajorova, Ing. Ladislav Hluchy

seel15-019 A tool for developing instructional digital comic strips with associated  
learning objectives  
Dr Fotis Lazarinis, Associate Professor Chris Panagiotakopoulos, Associate Professor  
Vassilios Verykios

seel15-028 Music Coding in Primary School  
Prof. Luca Andrea Ludovico, PhD. Giuseppina Rita Mangione

seel15-031 Smart Edutainment as a Way of Enhancing Student´s Motivation (on the  
Example of Board Games)  
Mrs Vera Novikova, Mrs Ludmila Beskrovnaya

SEEL-5

Thurs 18 June, 16.00-18.00

Room: Nettuno 6

***Smart Training Related Topics***

Chair: Prof. Danguole Rutkauskeine

seel15-048 The design research of future informal learning space -Constructing the "Smart Space" of Beijing Normal University Library

Ms. Yun Zhang, Doctor Fengkuang Chiang, Mr. Anan Liang, Ms. Lan Liu, Ms. Huiping Sun

seel15-072 Methods and Technologies for ICT workers Virtual Mobility

Dr Danguole Rutkauskiene, Mrs Daina Gudoniene

seel15-058 Extensiveness of Manufacturing and Organizational Processes: an Empirical Study on Workers Employed in the European SMEs

Assoc. Prof. Nunzio Casalino, Full Prof. Marco De Marco, Full Prof. Cecilia Rossignoli

seel15-054 Smart Control System of Human Resources Potential of the Region

professor Olga Ivashchuk, professor Igor Konstantinov, senior lecturer Irina Udovenko

seel15-046 Smart learning environments using social network, gamification and recommender system approaches in e-health contexts

PhD Student Enrica Pesare, PhD Di Bitonto Pierpaolo, Professor Roselli Teresa, Assistant Professor Rossano Veronica

seel15-060 Real-time Feedback during Colonoscopy to Improve Quality: How Often to Improve Inspection?

Professor Piet de Groen, PhD Felicity Enders, PhD Junghwan Oh, MS Michael Szweczyński, PhD Wallapak Tavanapong, PhD Johnny Wong

SEEL-6

Thurs 18 June, 16.00-18.00

Room: Nettuno 1

***Smart e-Learning - 2***

Chair: Dr. Natalia Dneprovskaya

seel15-020 Situation Awareness Training in E-Learning

Doctor Liubov Lisitsyna, Student Elena Cherepovskaya, Professor Andrey Lyamin,  
Doctor Ivan Martynikhin

seel15-017 Smart educational environment as platform for individualized learning  
adjusted to a student's cultural-cognitive profile

Dr. Zinaida Avdeeva, Dr.Sc Naida Omarova, Dr. Julia Taratuhina

seel15-021 Development of University's web-services

Dr Vladimir Tikhomirov, Dr Natalia Dneprovskaya, Dr Ekaterina Yankovskaya

seel15-014 The information system of distance learning for people with impaired  
vision on the basis of artificial intelligence approaches

Smart e-Learning Galina Samigulina, Smart e-Learning Assem Shayakhmetova

SEEL-7

Fri 19 June, 9.00-11.00

Room: Nettuno 6

***Smart Teachers' Education - 1***

Chair: Dr Marina Lapenok

seel15-039 Preparation and Evaluation of Teachers? Readiness for Creation and Usage of Electronic Educational Resources in School?s Educational Environment  
Doctor Marina Lapenok, Student Olga Lapenok, Professor Alevtina Simonova

seel15-026 The Word Cloud Illustration of the Cognitive Structures of Teacher Candidates about Education Concept  
Assist Prof Nuray Zan, Prof. F. İnci Morgil, Assist Prof Burcu Umut Zan

seel15-055 Raising the level of future teachers' professional competence in the conditions of informational and educational environment  
Dr. Irina Rozhina, Dr. Anna Lozinskaya, Prof. Tamara Shamalo

seel15-073 Development and Evaluation of a Course Model to Prepare Teachers in Mobile-Assisted-teaching (MAD-teaching)  
Dr. Chun-yen Chang, Ph.d. Candidate Yu-ta Chien

seel15-034 Block Magic: a prototype to bridge digital and physical educational materials to support children learning processes  
Dr. Michela Ponticorvo, Dr. Andrea Di Ferdinando, Eng. Raffaele Di Fuccio, Prof. Orazio Miglino

seel15-033 Pedagogical Practices to teacher education for gerontology education  
Dr Leticia Machado, Dr Patricia Behar, Dr Johannes Doll



SEEL-8

Fri 19 June, 13.30-15.30

Room: Nettuno 6

***Smart Teachers' Education - 2***

Chair: Dr Marina Lapenok

seel15-008 Forming and self-evaluation of ICT- competence of mathematics teachers to be in the course of their professional training

Professor, Doctor Irina Lipatnikova, Doctor, Professor Alexander Usoltsev

seel15-023 ICT Proficiency Measurement while Realizing Information Activity of Students Majoring in Pedagogical Education

PhD Natalya Gerova

seel15-016 Training of future teachers in development and application of computer tools for evaluation of students academic progress

Associate professor Marina Mamontova, professor Petr Zuev

seel15-007 The diagnostics methods of students readiness for professional pedagogical activity within information educational environment

Associate professor Alexander Slepukhin, Professore Natalia Sergeeva

seel15-024 The Diagnostics of well-formed ability of students and teachers to make and to evaluate the system of modern methods of teaching mathematics

MRS Irina Semenova, MR Sergey Novoselov

seel15-011 Formalization of knowledge systems on the basis of system approach

doctor of sc, prof Natalia Serdyukova, doctor of sc, prof Vladimir Serdyukov, doctor of sc, prof Vladimir Slepov

