

CONFERENCE PROGRAM

ICMAE 2018

The 9th International Conference on Mechanical and
Aerospace Engineering

With workshops of

ICPAM 2018

International Conference on Pure and Applied Mathematics

July 10-13 | Eotvos Lorand University | Hungary

Conference Venue

Faculty of Informatics, Eotvos Lorand University



Address: ELTE Faculty of Informatics, Lagymányosi Campus, Eotvos Lorand University, 1/C. Pazmany
Peter setany, Budapest-1117

Welcome Address

It is our great pleasure to invite you to attend the The 9th International Conference on Mechanical and Aerospace Engineering(ICMAE), with workshops of 2018 the 7th International Conference on Pure and Applied Mathematics(ICPAM), to be held from July 10-13, 2018, in Faculty of Informatics, Eötvös Loránd University, Budapest, Hungary.

ICMAE has been one of the main events in Europe region with a focus on Aerospace Mechatronics and Avionics Systems, Aerospace Communications, Mechanical Engineering in Aerospace, Electronic Systems, Aerospace Engineering and Management, Pure and Applied Mathematics, etc. For near a decade, the conference has attracted world class researchers from both academic and engineering to share their state-of-the-art results in relative fields. The conference consists of Keynotes, plenary and invited speeches from experts, paper presentations, ELTE academic visit, tutorials and symposiums.

After several rounds of review procedure, the program committee accepted those abstracts to be presented on conference, and papers to be published in conference proceedings. We wish to express our sincere appreciation to all the individuals who have contributed to ICMAE 2018 conference in various ways, in the program committee for their thorough review of all the submissions, which is vital to the success of the conference, and also to the members in the organizing committee and the volunteers who had dedicated their time and efforts in planning, promoting, organizing and helping the conference. Special thanks are extended to our Local Chair-Prof. Kerek Ágnes, for his contribution, and great support from Faculty of Informatics, Eötvös Loránd University. Without their support, this conference cannot be prepared so smoothly and successfully.

This conference program is highlighted by 3 Keynote Speakers: Prof. Anh Dung NGO, Ecole de technologie supérieure (U. du Quebec), Canada; Prof. Ian McAndrew, Embry Riddle Aeronautical University, UK; Prof. Dashnor Hoxha, Orleans University, France; 4 Plenary Speakers: Prof. Simon Barrans, University of Huddersfield, United Kingdom; Prof. Hamid Bahai, Brunel University, UK; Prof. Necdet Bildik, Celal Bayar University, Turkey; Prof. Ruggero Maria Santilli, Institute for Basic Research, USA.

Budapest is paradise for explorers. Keep your senses primed and you'll discover something wonderful at every turn. Budapest's beauty is not all God given; humankind has played a role in shaping this pretty face too. Architecturally, the city is a treasure trove, with enough baroque, neoclassical, Eclectic and art nouveau buildings to satisfy everyone. Overall, though, Budapest has a *fin de siècle* feel to it, for it was then, during the capital's 'golden age' in the late 19th century, that most of what you see today was built.

We wish you a successful conference and enjoyable experience in Budapest!

Conference Organizing Committees
Budapest, Hungary

Conference Committees

Conference Chairs	<p>Dashnor Hoxha, Orleans University, France</p> <p>Ramesh K. Agarwal, Washington University in St. Louis, USA</p> <p>Ian McAndrew, Embry Riddle Aeronautical University, UK</p>
Local Chair	<p>Kerek Ágnes, Eötvös Lorand University, Hungary</p>
Technical Program Co-chairs	<p>ANH DUNG NGO, Ecole De Technologie Superieur (U. of Quebec), Canada</p> <p>Necdet Bildik, Celal Bayar University, Turkey</p> <p>Huafeng Ding, China University of Geosciences (Wuhan), China</p> <p>Musilova Michaela, the Slovak Organisation for Space Activities, Slovakia</p> <p>Huisheng Shi, Tongji University, China</p>
Steering Co-chairs	<p>Simon Barrans, University of Huddersfield, United Kingdom</p> <p>Eldad Avital, Queen Mary University of London, United Kingdom</p> <p>Hamid Bahai, Brunel University, UK</p> <p>Ibrahim Ozkol, Istanbul Technical University, Turkey</p> <p>Katarina MONKOVA, Technical University in Kosice, Slovakia</p>
International Publicity Co-chairs	<p>Kamel Mehdi, University of Tunis EL Manar, Tunisia</p> <p>Peter Monka, Faculty of manufacturing technologies, Slovakia</p> <p>Yoshifumi Yokoi, National Defense Academy of Japan, Japan</p> <p>Myoung-Gyu Lee, Korea University, Korea</p> <p>ADRIANA FRANCA, Universidade Federal de Minas Gerais, Brazil</p>
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Nam Seo Goo, Konkuk University, Korea
Tomasz Kopecki, Politechnika Rzeszowska, Poland
Antonin Pistek, Institute of Aerospace Engineering, Czech Republic
Zheng Hong Zhu, York University, Canada
TAHİR HİKMET KARAKOÇ, Anadolu University, Turkey
Ferhan Kuyucak Şengur, Anadolu University, Turkey
Mahmut Adil CYÜKSELEN, Istanbul Technical University, Turkey
Josef Klement, Brno University of Technology, Czech Republic
Jae Wook Kim, University of Southampton, UK
Lucia Knapci kova, Technical University of Košice, Slovakia
Jozef Černecký, Technical University of Zvolen, Slovakia
Tomas Kliment, Slovak Legal Metrology, Slovakia
Vsevolod V. Koryanov, Bauman Moscow State Technical University, Russia
J. H. Chen, National Taiwan Ocean University, Taiwan
Ramazan Çitak, Gazi University, Turkey
Woradej Manosroi, Chiang Mai University, Thailand
Rosario Pecora, Università degli Studi di Napoli "Federico II", Italy
Jung-Chou Hung, Feng Chia University, Taiwan
Mehmet Metin Yavuz, Middle East Technical University, Turkey
Anshuman Srivastava, SIET Allahabad, India.
Mikio HORIE, Tokyo Institute of Technology, Japan
Yuexi Xiong, Beijing University of Aeronautics and Astronautics, China
Satuluri Srikan, Lendi Institute of Engineering & Technology, India
Maatouk Khoukhi, United Arab Emirates University, UAE
Jose Alejandro POSADA-MONTOYA, Pascual Bravo University Institution, Colombia
Qin Xuguo, Beijing Institute of Space Long March Vehicle, China
Espen Oland, The Arctic University of Norway, Norway
Mehmet Şerif Kavsaoğlu, Fatih Sultan Mehmet Vakıf University, Turkey
Michael A. Saliba, University of Malta, Malta
Yongdae Kim, Kyungil University, South Korea
Cem Tahsin Yücer, National Defense University, Turkey
Zhang Jianrun, Southeast University, China
Fedir Gagauz, National Aerospace University "KhAI", Ukraine
Ruxandra Mihaela Botez, École de technologie supérieure, Canada
Dimitris Drikakis, University of Strathclyde, UK
Fatih Karpaz, Uludağ University, Turkey
Zhaoheng Liu, Université du Québec, Canada
Kai Peng, Northwestern Polytechnical University, China
Ming Zhu, Beihang University, China
T. Rajasanthosh Kumar, Ace Engineering College, India
Chen Yu-chun, Northwestern Polytechnical University, China
Marc Thomas, Université du Québec, Canada
Sun Yuwei, Beijing Institute of Spacecraft Environment Engineering, China
LIU Pei-jin, Northwestern Polytechnical University, China
Dumitrache Alexandru, "POLITEHNICA" University of Bucharest, Romania
Mohamed DAMIR, Alexandria University, Egypt
Haydar Al-Ethari, University of Babylon, Iraq

Program at a Glance

July 10, 2018 | Tuesday

		Room# 0-820
10:00-17:00	Room#0-820	Registration & Conference Kits Collection
14:30-15:00		ELTE Campus Visit
		Room
15:25-15:30	Tutorial Introduction	Dr. Jurij Sidor , <i>Faculty of Informatics, ELTE, Hungary</i>
15:30-15:45	ELTE Tutorial	Materials and Mechanical Engineering

July 11, 2018 | Wednesday

		Room#0-821
09:00-09:05	Opening Remarks	Prof. Ian McAndrew , <i>Embry Riddle Aeronautical University, UK</i>
09:05-09:20	Welcome Address	Prof. Zoltán HORVÁTH , <i>Dean for Faculty of Informatics, ELTE, Hungary</i>
09:20-10:05	Keynote Speech-I	"Experimental Investigation of Operational Conditions Effects on Axial Fatigue behavior of Carbon/Epoxy Plain Weave Laminates Containing Artificial Flaw" Prof. Anh Dung Ngo , <i>École de technologie supérieure, Québec, Canada</i>
10:05-10:45	Group Photo& Coffee Break	
10:45-11:30	Keynote Speech-II	"Is the Sky above Us Safe and How has this Been Influenced by the Past and Present Policies?" Prof. Ian McAndrew , <i>Embry Riddle Aeronautical University, UK</i>
11:30-12:00	Plenary Speech-I	"The Neutron Synthesis from the Hydrogen and its Application for National Security" Prof. Ruggero Maria Santilli , <i>Institute for Basic Research, USA</i>
12:00-13:00	Lunch Break	
		Room# 2-502
13:00-15:30	Session A-1	Digital Manufacturing System and Weaponry Manufacturing
15:30-15:45	Coffee Break	
15:45-18:30	Session A-2	Power Machinery System and Analysis
		Room # 2-712
13:00-15:30	Session B-1	Control Science and Mechanical Engineering
15:30-15:45	Coffee Break	
15:45-18:30	Session B-2	Engine Design and Performance Assessment
		Room # 0-820
13:00-15:30	Session C-1	Electronic Systems and Communication Technology in Aerospace
15:30-15:45	Coffee Break	
15:45-18:30	Session C-2	Materials Science and Engineering
		Room # 0-818
13:00-14:15	Symposium-1	Approximation Theory and Special Functions - 5th Series
14:15-14:30	Free Talk	
14:30-15:30	Symposium-2	Approximation Theory and Special Functions - 5th Series
15:30-15:45	Coffee Break	
15:45-18:30	Symposium-3	Approximation Theory and Special Functions - 5th Series

		Room# 1-820
13:00-15:30	Tutorial-1	Isomathematics
15:30-15:45	Coffee Break	
15:45-18:30	Tutorial-1	Isomathematics
18:30-20:00	Dinner	

July 12, 2018 | Thursday

		Room # 0-821
09:00-09:05	Opening Remarks	Prof. Dashnor Hoxha , <i>Orleans University, France</i>
09:05-09:50	Keynote Speech-III	“Effective Thermal Properties of Heterogeneous Materials from far Field Contactless Temperatures Measurements” Prof. Dashnor Hoxha , <i>Orleans University, France</i>
09:50-10:20	Plenary Speech-II	“Understanding the Behaviour of V-band Clamps” Prof. Simon Barrans , <i>University of Huddersfield, UK</i>
10:20-10:50	Coffee Break & Group Photo	
10:50-11:20	Plenary Speech-III	“On the Solution of KdV-like Equations by the Optimal Perturbation Iteration Technique” Prof. Necdet Bildik , <i>Celal Bayar University, Turkey</i>
11:20-11:50	Plenary Speech-IV	“” Prof. Hamid Bahai , <i>Brunel University, UK</i>
12:00-13:00	Lunch	
		Room # 2-502
13:00-15:30	Session A-3	Power System Modeling and Analysis in Aerospace
15:30-15:45	Coffee Break	
15:45-18:30	Session A-4	Power Electronics Technology and Communication Engineering
		Room # 2-712
13:00-15:30	Session B-3	Fluid Mechanics and Applications
15:30-15:45	Coffee Break	
15:45-18:00	Session B-4	Aircraft Structure Design and Optimization
		Room # 0-820
13:00-15:30	Session C-3	Aircraft Design and Spacecraft
15:30-15:45	Coffee Break	
15:45-17:00	Session C-4	Image Processing and Application
		Room # 1-820
13:00-15:30	Session D-1	Mathematical Theory and Calculation
15:30-15:45	Coffee Break	
15:45-18:30	Session D-2	Mathematical Modeling and Physical Mathematics
		Room # 0-818
13:00-15:30	Tutorial-2	Isomechanics& Isochemistry
15:30-15:45	Coffee Break	
15:45-18:30	Tutorial-2	Isomechanics& Isochemistry
18:30-20:00	Dinner	

July 13, 2018 | Friday

09:00-17:00 Optional One-day City Visit

Keynote Speakers



Speech I: Jul. 11(Wed.) 9:20-10:05

Venue: Room 0-821

“Experimental Investigation of Operational Conditions Effects on Axial Fatigue Behaviour of Carbon/Epoxy Plain Weave Laminates Containing Artificial Flaw ”

Prof. Anh Dung NGO

Ecole de technologie superieure (U. du Quebec), Canada

Abstract of Speech

Aeronautical composite structures having manufactured flaws usually operate in harsh conditions. This work aimed at characterizing the behavior of quasi-isotropic plain weave carbon/epoxy laminates containing artificial flaw under axial fatigue loading at various conditions such as hygrothermal, frequency and stress ratio. Dry and wet coupons were tested under load-controlled fluctuated cyclic loading with two stress ratios of $R = 0.1$ and $R = -0.1$ and two load frequencies of 7 Hz and 15Hz at room temperature and 82°C under different stress levels. Delamination threshold onset were determined based on the allowable stiffness change as failure criterion that was verified using ultrasonic imaging (C-Scan) technique, at each testing condition. At first, under tensile cyclic loading at 7Hz the experimental results showed that individually, moisture reduced the fatigue life of the studied material more than temperature did whereas their combination was much more damaging. On the frequency effect, the experimental results at 15Hz suggested that, in general, fatigue life increased with load frequency for most environmental conditions, except for two conditions: (1) room temperature and dry at high stress level, (2) 82°C and wet at low stress level. Finally, partially reversed tension-compression cyclic loading tests showed that this loading mode was more damaging than the tension-tension one due to the complex interaction and evolution of the compressive and tensile types of damage.

Anh Dung NGO

BIO: About Prof. Anh Dung NGO: B.Sc. A in Mechanical Engineering (É. Polytechnique, Canada), M.Sc. in Wood technology (U. Laval, Canada), Ph.D. in Mechanical Engineering (Concordia U., Canada). Professor NGO spent 18 years in industry as engineer and in governmental agency first as engineer and later as chief officer of the Occupation Safety Division at the Prevention Branch of the Quebec Occupational Health and Safety Commission before joining the university in 1991. He was the Chairman of the Mechanical Engineering Department from 1999 to 2004. He is the founder of two research groups, one in Occupational Safety and one in Composite Materials. He is also the editor of the Proceeding of the EIGHTH JOINT CANADA-JAPAN WORKSHOP ON COMPOSITES and author of sixty scientific papers and technical reports on Composites Materials and Occupational Safety.



Speech II: Jul. 11(Wed.) 10:45-11:30
Venue: Room 0-821

“Is the Sky above Us Safe and How has this been Influenced by the Past and Present Policies?”

Prof. Ian McAndrew
Embry Riddle Aeronautical University, UK

Abstract of Speech

There have been many instances of aircraft collisions in the sky and these have been for a variety of reasons and causes. Technology has been used to address these concerns, yet these have not all been successful for other reasons. This presentation reviews the historical and technical reasons what and why has happened to produce this current situation and how the safety may not be as high as assumed. It also introduces the concerns that Unmanned Ariel Vehicles add and how these are being reviewed to minimize. Furthermore, the risk analysis of these implications due to Security and Cyber security.

Ian McAndrew

Ph.D. in Mechanical Engineering ; M.Sc. in Manufacturing MA in Education Management ; Pg.D. in Education Training; B.A. (Hons) in Mechanical Engineering; B.A. in Production Engineering Member of the Institute of Electrical Engineers. Dr McAndrew spent 12 years in industry as a designer before entering academia. He has over 20 years of teaching experience in the UK, Europe, Middle East and Far East. He has supervised many PhD students and published extensively for over 20 years. He is the author of a book and Editor of a new Journal being produced with a focus on Aviation. Currently he is the Department Chair of Graduate Studies in the College of Aeronautics Worldwide at Embry Riddle Aeronautical University. His research interests are in Aerodynamics and Effective Education, which he has published extensively. He has presented at many Conferences and believes these are critical research meetings for those that are new to research and the experienced to mentor the next generation.



Speech III: Jul. 12(Thu.) 9:05-9:50

Venue: Room 0-821

“Effective thermal properties of heterogeneous materials from far field contactless temperatures measurements ”

Prof. Dashnor Hoxha
Orleans University, France

Abstract of Speech

Classical methods for determination of thermal properties of materials could be revealed inappropriate when used for macroscopic heterogeneous materials. This is because these parameters are typically obtained using measures on small volumes which could be smaller than VER of a heterogeneous material. To overcome this drawback a method, using far field temperature measurements induced by a laser spot on a heterogeneous material, is developed. Theoretical considerations and inverse approach used are explained in details before a validation of the method and its use in various heterogeneous materials as case studies.

Dashnor Hoxha

About Prof. Dashnor Hoxha: After obtained an engineer degree from Polytechnic University of Tirana and a Bachelor in Physics from Natural Science Faculty of Tirana, Albania in 1991, I was awarded M.Sc. and Ph.D. in Geomechanics Hydrosystems and Structures from National Polytechnic Institute of Lorraine (INPL) France in 1998. I worked for ten years in the research and developing industry before joining the University of Orleans as Head of Sustainable Constructions Division in 2007. I work actually in the Laboratory of Pluridisciplinary Research in Engineering Systems, Mechanics and Energy (PRISME) and I teach as Professor in Polytechnic School of Orleans. I published more than 34 papers in refereed international journals and 45 papers in conferences and 4 book chapters and I have been involved in many international conferences as Technical Chair and tutorial presenter.

Plenary Speakers



Speech I: Jul. 11(Wed.) 11:30-12:00

Venue: Room 0-821

“The Neutron Synthesis from the Hydrogen and its Application for National Security”

Prof. Ruggero Maria Santilli
Institute for Basic Research, USA

Abstract of Speech

The synthesis of the neutron from the hydrogen atom in the core of stars is the most fundamental nuclear synthesis in nature. Its theoretical understanding has requested decades of research in mathematics, physics and chemistry because the rest energy of the neutron is "bigger" than the sum of the rest energies of the proton and of the electron, under which condition 20th century mathematics and related theories are no longer effective due to their sole characterization of isolated point-particles in vacuum, while the compression of the electron within the hyperdense proton requires the representation of particles with their actual size. In the early 1980s, when at the Department of Mathematics of Harvard University under DOE support, the author constructed a covering of 20th century applied mathematics based on the isoassociative product $A*B = AT*B$ of all possible quantities A, B, with ensuing isotopic lifting of numeric fields into isofields with isounit $I^* = 1/T^* > 0$, and necessary generalization of the Newton-Leibnitz differential calculus into a form defined over the volume represented by the isounit I^* based on the isodifferential $d^*r^* = T^* d(rI^*) = dr + r T^* dI^*$ and related conventional and partial isodifferential calculus. The ensuing new mathematics, known as isomathematics, and related theories, known as isomechanics and as isochemistry, did indeed allow a quantitative representation of "all" characteristics of the neutron in its synthesis from the hydrogen. Such a representation then allowed in the late 1990s the achievement of the first known neutron synthesis in laboratory from a hydrogen gas. These studies were recently brought to industrial maturity by the U. S. publicly traded company Thunder Energies Corporation which is now manufacturing and selling a Directional Neutron Source (DNS, international patent pending) producing a flux of neutrons with controlled direction, CPS and energy. In this lecture, we briefly outline the novel isomathematics, isomechanics and isochemistry, their application to the neutron synthesis and point out its application such as: the use for national security because the DNS provides the most effective detection of nuclear weapons smuggled in containers; the detection of the presence and concentration of precious metals in mines; and other applications (see for more details www.santilli-foundation.org/docs/new-sciences-new-era.pdf)

Ruggero Maria Santilli

About Prof. Ruggero Maria Santilli: Academic and scientific notes: Dr. R. M. Santilli received the highest possible education in Italy, emigrated in the USA with his family in 1967 following an invitation from the University of Miami, Florida, to conduct research under NASA support, after which he was in the faculty of Boston University, MIT, and Harvard University under support from NASA, USAFOSR and DOE. From 1985 on, Dr. Santilli has been Professor of Physics and President of The Institute for Basic Research originally located within the compound of Harvard University and moved to Florida in 1989. Dr. Santilli became a U. S. Citizen in 1986. He is the author of 325 papers in mathematics, physics and chemistry published in refereed journals, has written 20 Ph. D. level monographs in various fields, the founder of three scientific journals and the editor of various journals. For more details, please visit the full-length curriculum <http://www.i-b-r.org/Ruggero-Maria-Santilli.htm>. Corporate notes: Dr. Santilli has been Scientific Advisor to various U. S. companies. From 2007 to 2013, Dr. Santilli has been Chief Scientist and Chairman of the Board of Magnegas Corporation, a U. S. company publicly traded at NASDAQ under the stock symbol MNGA, producing and selling the gaseous magnegas fuel synthesized from liquid wastes with complete combustion. For more details, please visit the website <http://www.magnegas.com>. Since 2014, Dr. Santilli is the founder, CEO and Chief Scientist of Thunder Energies Corporation, also a publicly traded company with stock symbol TNRG, for the development of three cutting edge new technologies: the synthesis of neutrons from a hydrogen gas and its application; a new combustion of fossil fuels with complete combustion, and new telescopes for the detection of antimatter galaxies and antimatter cosmic rays. For more details, please visit <http://www.thunder-energies.com>. Dr. Santilli's Honor: Dr. Santilli has been the recipient of: the 1982 gold medal for scientific merits from the Universite' d'Orleans, France; the 1990 nomination by the Estonia Academy of Sciences "among the most illustrious applied mathematicians of all times"; the 2009 Mediterranean Prize; the 2009 scientific prize from the U. S. Sons of Italy; the 2011 scientific prize from Kathmandu University, Nepal. In 2011 he was recognized as an invited member of the European Society of Computational Methods; in 2016 he received the ICNPAA award at the University of La Rochelle, France; and in 2016 he received the Fray International Sustainability Award, granted at the SIPS International Conference, Hainan Island, China. Dr. Santilli has been nominated since 1987 for the Nobel Prize in Physics and, separately Chemistry. In September 2011, Dr. Santilli was knighted by the Republic of San Marino as a member of the millenary Equestrian Order of Sant'Agata. For more details, please visit the website <http://santilli-foundation.org/santilli-nobel-nominations.html>

**Speech II: Jul. 12(Thu.) 9:50-10:20****Venue: Room 0-821****“Understanding the Behavior of V-band clamps”****Prof. Simon Barrans**

University of Huddersfield, UK

Abstract of Speech

V-band clamps are widely used in automotive, aeronautical and process industries as a means of connecting circular flanges. Applications include joining together the compressor, bearing and turbine housings in turbochargers, holding together the cans used to enclose diesel particulate filters and connecting pipes used in many processes. These clamps are popular because compared to the equivalent bolted flange joint, they require fewer parts, take up less space both when installed and during installation. For more than a decade, the behaviour and characteristics of these clamps has been researched at Huddersfield. A number of researchers have looked at aspects including stresses generated in the clamps during use, axial clamping load, forming of the clamps, the torsional load capacity and their performance at high temperature. This presentation will give an overview of this research highlighting both the most successful elements and those aspects that have proved most challenging.

Simon Barrans

About Dr Simon Barrans: BSc in Nuclear Engineering (Manchester University), PhD in Mechanical Engineering (Huddersfield University). Fellow of the Institution of Mechanical Engineers and serves on their Academic Assessment Committee and Academic Standards Panel. Fellow of the Higher Education Academy. Dr Barrans spent 5 years in the Nuclear Industry before entering academia. For 8 years he was the leader of the Mechanical Engineering Subject Area at Huddersfield. Over the past 20 years Dr Barrans has supervised a number of PhD students and has published extensively on topics including air bearings, V-band clamps and multi-criteria optimisation. He is an editor for the Central European Journal of Engineering and a reviewer for seven other international journals. In 2014 he moved to the Turbocharger Research Institute at Huddersfield and is currently investigating the optimisation of turbine and compressor housings, high temperature bolted joints, wheel burst prediction and containment modelling and the use of V-band retainers in turbochargers.



Speech III: Jul. 12(Thu.) 10:50-11:20

Venue: Room 0-821

“ On the Solution of KdV-like Equations by the Optimal Perturbation Iteration Technique ”

Prof. Necdet Bildik

Celal Bayar University, Turkey

Abstract of Speech

In this study, optimal perturbation iteration method is implemented to solve Korteweg de Vries (KdV)-like equation to obtain semi analytical solutions. We examine two illustrations to analyze the new optimal perturbation iteration method. This work displays that optimal perturbation iteration technique converges fast to the exact solutions of the differential equations at lower order of approximations.

Necdet Bildik

Necdet Bildik was born in Sivas/TURKEY in 1951. He graduated from Ankara University in 1974. He earned the M.Sc. degree in University of Louisville, Kentucky, USA in 1978. He awarded the Ph.D. degree in Oklahoma State University, USA in 1982. He was Assistant Professor in 1988 and also he was became Associate Professor in 1995. He was promoted to be Professor in 2003. He is interested in numerical analysis, ordinary, partial and non-linear differential equations, ergodic theory, stability theory.

He has over than a hundred published articles in the national and international journals and conferences. He also serves as a reviewer for many international journals.



Speech IV: Jul. 12(Thu.) 11:20-11:50
Venue: Room 0-821

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Prof. Hamid Bahai
Brunel University, UK

Hamid Bahai

Hamid Bahai received his PhD degree in 1993 in Computational Mechanics from Queen Mary College, University of London. Between 1993 and 1995 he worked as a Senior Research Engineer at T&N Technology where he was involved in research and development work on a number of projects for the automotive and aerospace industries. This was followed by a period at Halliburton Inc during which time he carried out design and analysis of a number of major offshore structures. In 1996 he moved to the aerospace industry by joining Astrium, an aerospace subsidiary of European Aeronautics Defence and Space company, where as a senior scientist, he played a leading role in conducting design, mathematical modelling and computational analysis of Euro3000 space craft structures and Arian launcher / spacecraft adapter. It was during this period that he was made a fellow of the Institute of Mechanical Engineers for his outstanding technical contributions and services to the scientific and engineering communities. In 1998 he returned to academia and joined Brunel University where he is currently a Professor in Computational Mechanics and Head of Department of Mechanical & Aerospace Engineering. He has led a number of research projects covering a wide range of topics in the area of Computational Mechanics and has published over 120 papers on various themes in the field.

Amongst Hamid Bahais many theoretical and applied contributions include the development of a new type of non-linear shallow shell strain based finite element and a novel inverse eigen value formulation for optimising the vibratory behaviour of structures. His current research interests include development of non-linear finite element formulations and fluid-solid interaction algorithms. He has conducted consulting work in the field of structural integrity for many UK and International companies and has given invited talks and courses the world over on various topics in structural computational mechanics. He is the Editor-in-Chief of the European Journal of Computational Mechanics.

Special Events

ELTE Tutorial

Teaching informatics at ELTE was initiated in 1969. The courses, offered to students of mathematics, were called computing techniques. In 1972 professor Imre Kátay recognized the growing significance of informatics and initiated a new curriculum called programmer-mathematician. In order to organize the introduction of the new courses the Department of Numerical and Computer Mathematics was established. The number of students was increasing rapidly, from 60 in 1972 to 400 in the eighties, and it reached 2000 by the end of the nineties. The huge department had to be divided into three specialized ones, which together created the Institute of Informatics later on. In 2003 the Institute of Informatics and the Department of Cartography of the Faculty of Science established the Faculty of Informatics.

Engineers from Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology, Szombathely, Hungary, will join and deliver speeches about Materials and Mechanical Engineering.

Tutorial

SPECIAL SESSIONS ON: ISOMATHEMATICS, ISOMECHANICS, AND ISO-CHEMISTRY

General Chair

Dr. Ruggero Maria Santilli

Thunder Energies Corporation

1444 Rainville Rd., Tarpon Springs, FL 34684, U.S.A.

Website: <http://thunder-energies.com/>



Symposium

This special session is the 5th edition of a series of mini-symposia which bring together researchers from all areas Approximation Theory and Special Functions. The first one was organized within the international conference ICNAAM 2013 Conference in Greece, the second one in MDS 2014 Conference in Bulgaria, the third one in ETAMM 2016 Conference in France, and the last one in ISAAC 2017 Conference in Sweden.

The highlighted topics (but not limited to) Classical Approximation, Korovkin-Type Approximation, Statistical Approximation, Interpolation, Fuzzy Approximation, Summability, Time Scales, Constructive Approximation, Orthogonal Polynomials, Generating Functions, Matrix-Valued Polynomials, q-Analysis, Fractional Analysis, General Orthogonal Systems, Fourier Analysis.



TOBB ETÜ
Ekonomi ve Teknoloji Üniversitesi



Guidelines for Presentations

Instructions for Presenters

Speakers are requested to be in their respective session rooms at least 10 minutes prior to the commencement of each session.

The duration of a keynote presentation is 40 minutes. This includes 35 minutes for the presentation itself and 5 minutes for Q&A. The duration of a regular presentation is 15 minutes. This includes 12 minutes for the presentation and 3 minutes for Q&A. We would appreciate if all presenters can adhere strictly to this time limit.

Presentation must be carried out using Microsoft PowerPoint or PDF. No slide projectors will be made available.

Speakers should bring their presentation materials in a thumb-drive and upload the files from 8:00-8:30 daily or during the coffee breaks or lunches or before the session starts.

Instructions for Presiders

Please time the presentation. Remind the speaker as follows

Regular Talk: One ring at 10 minutes, two rings at 12 minutes.

It is a good idea to remind your speakers at the start of the session that you will be timing the speech. Please remember the time frame. Keeping the program to time is very important. Please be aware of the time periods speakers have been designed to present.

If someone in your session didn't show up, please go on with next speaker, and recall the missing one every time when it's next speaker's turn. In this case, we require the speakers of each session should stay the whole session.

Instructions for Poster Presentation

Poster presenter can leave your poster at the registration desk, our staff will help you to put up the posters at least 1 hour prior to the commencement of each poster session.

At least one author should be present for each poster during the poster session.

Technical Program

Date: Jul. 10, 2018

Time: 14:30-16:45

Campus Visit	
14:30-15:00	Campus Visit
ELTE Tutorial “Materials and Mechanical Engineering” Chairperson: Dr. Jurij SIDOR VENUE: Room #	
15:25-15:30	Tutorial Introduction
15:30-15:45	Inverse Design of Wind Turbine Blades for Extreme Weather Applications Dr. Laszlo E. Kollar Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology, Szombathely, Hungary
15:45-15:00	Wear modelling in Total Knee Replacements Dr. Gusztav Fekete Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology, Szombathely, Hungary
15:00-15:15	Tribology questions in case of light aircraft's silent block Dr. Ando Matyas and Rajmund Lefanti Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology, Szombathely, Hungary
15:15-15:30	Development of microstructure and texture in Al alloys Dr. Pal Gyula Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology, Szombathely, Hungary
15:30-15:45	Modelling the evolution of crystallographic texture and plastic strain ratio in Al alloys Dr. Jurij Sidor Eötvös Loránd University, Faculty of Informatics, Savaria Institute of Technology, Szombathely, Hungary

Date: Jul. 11, 2018

Time: 9:00-18:30

Time	Activity	Representative VENUE: Room # 0-821
09:00-09:05	Opening Remarks	Prof. Ian McAndrew , <i>Embry Riddle Aeronautical University, UK</i>
09:05-09:20	Welcome Address	Prof. Zoltán HORVÁTH , <i>Dean for Faculty of Informatics, ELTE</i>
09:20-10:05	Keynote Speech-I	"Experimental Investigation of Operational Conditions Effects on Axial Fatigue behavior of Carbon/Epoxy Plain Weave Laminates Containing Artificial Flaw" Prof. Anh Dung Ngo , <i>École de technologie supérieure, Québec, Canada</i>
10:05-10:50	Coffee Break & Group Photo	
10:45-11:30	Keynote Speech-II	"Is the Sky above Us Safe and How has this Been Influenced by the Past and Present Policies?" Prof. Ian McAndrew , <i>Embry Riddle Aeronautical University, UK</i>
11:30-12:00	Plenary Speech-I	"The Neutron Synthesis from the Hydrogen and its Application for National Security" Prof. Ruggero Maria Santilli , <i>Institute for Basic Research, USA</i>
12:00-13:00	Lunch	

Session A-1 "Digital Manufacturing System and Weaponry Manufacturing" Chairperson: VENUE: Room #2-502		
13:00-13:15	(C3013) COMPARATIVE STUDY TO THE EFFECT OF SQUEEZE CASTING AND MOLD VIBRATION ON FATIGUE PERFORMANCE OF AL-17% Si ALLOY Prof. Haydar Al-Ethari , Alaa shaker obaida, Akhlas Khalid Zamel University of Babylon -IRAQ	
13:15-13:30	(C066) Elasto-Plastic Stress Analysis Methodology Establishment for Forging Dies Mr. Dattaprasad Pandurang Lomate , Mr. Govind Jagtap, Mr. Abhijit Patil, Mr. Sanket Inamdar, Mr. Manoj Ukhande & Dr. Rajkumar Singh Bharat Forge Ltd. India	
13:30-13:45	(C1017) Numerical Simulation and Experimental Research on Thermo-mechanical-wear Coupling Dr. Peng Fei Chen , Y. X. Xiong, J. W. He, and Y. X. Zhao Beihang University, China	
13:45-14:00	(C1039) Analysis, Simulation and Improvement of Tool Crib Operations in an Aircraft Maintenance Hangar Edward Gingell and Assoc. Prof. Michael A. Saliba University of Malta, Malta	
14:00-14:15	(C2001) Effect of manufacturing tolerance and assembly errors on the characterization of small scale slider-crank mechanism Prof. Mohamed Damir , Engy Rashed ,Ahmed Khatib Faculty of Engineering, Alexandria, Egypt	
14:15-14:30	(C061) Derivation and Analysis of a State-Space Model for Transient Control of Liquid-Propellant Rocket Engines	

	Mr. Sergio Perez-Roca , Julien Marzat, Helene Piet-Lahanier, Nicolas Langlois, Marco Galeotta, Francois Farago and Serge Le Gonidec CNES-ONERA France
14:30-14:45	(C062-A) Experimental Study of Forebody and Strake Configuration Effects on Lateral-Directional Static Stability of a Fighter Aircraft Prof. Hyoung Seog Chung, Prof. Kybeom Kwon, Dr. Seung Pil Kim and Mr. Sang-Ho Kim Korea Air Force Academy, Republic of Korea Republic of Korea Air Force Academy & South Korea Korea Air Force Academy, South Korea
14:45-15:00	(C140) A Study of Close-Formation Approach Attack Tactic of Multiple Anti-Ship Missiles Ms. Yu-Young An , Kuk-Kwon Park, Chang-Kyung Ryoo Inha University, South Korea
15:00-15:15	(C2008) Influence of Initial Conditions on Trajectory of a Submunition via Unsteady Simulation Dr. Libin Ma , Chao Yan School of Aeronautic Science and Engineering, Beihang University, Beijing, China
15:15-15:30	(C139) Trajectory Estimation for a Ballistic Missile in Ballistic Phase using IR Images Mr. Kyujin Moon , Hojun Kwon, Chang-Kyung Ryoo, Hongchul Sim Inha University, South Korea
15:30-15:45	Best Presentation Award & Session Group Photo & Coffee Break

Session A-2
“Power Machinery System and Analysis”
Chairperson:
VENUE: Room #2-502

15:45-16:00	(C3014) Modal analysis as a tool of problem identification of gear mechanism Prof. Katarina Monkova , Peter Monka, Miorita Ungureanu, Nicolae Ungureanu FMT TU Kosice with the seat in Presov, Slovakia
16:00-16:15	(C005) A Family of Structure-Dependent Integration Methods Enhanced with Favorable Numerical Damping Prof. Shuenn-Yih Chang and Chiu-Li Huang National Taipei University of Technology, Taiwan, ROC
16:15-16:30	(C025) Comparative Analysis of a Floating mooring line-Driven Platform (FMDP) Having Different Mooring Lines Patterns Dr. Mamoun M. Horoub , Sikandar Khan and Sajid Ali Entrepreneurship Institute, King Fahd University of Petroleum and Minerals, Dhahran 31261, Saudi Arabia
16:30-16:45	(C033) Nonlinear dynamic responses of a cantilever beam under mixed mode of vibration loads Dr. Yi Li , Bing Sun, Jie Fang, Tong Liang and Guobiao Cai School of Astronautics, Beihang University, Beijing, China
16:45-17:00	(C2027) An Adaptive Feedback Turning SIR Particle Filter and Its Application on Fault Diagnosis of Auxiliary Power Unit Assoc. Prof. Kai Peng , Yingjie Hu, Ding Fan, Fan Yang, Zhaorong Zhang School of Power and Energy, Northwestern Polytechnical University, China
17:00-17:15	(C015) Modal Dynamic Analysis of a Synchronizer Mechanism: A Numerical Study Mr. A. Farokhi Nejad , G. Chiandussi, A. Moshrefzadeh, V. Solimine, A. Serra, E. Rulfi POLITECNICO DI TORINO, TURIN, Italy

17:15-17:30	(C085)Stress Analysis of Internal Gear Pairs with Unequal Tooth Thickness Tufan Gürkan Yılmaz, Assoc. Prof. Fatih Karpaz Uludag University, Turkey
17:30-17:45	(C3009) Experimental Investigation of the Impact Resistance of Involute Spur Gears Mr. Oğuz Doğan , Celalettin Yüce, Fatih Karpaz, Onur Can Kalay Uludag University, Turkey
17:45-18:00	(C068) Modeling thrust cutting force and torque in a vibratory drilling process of titanium alloy Ti6Al4V Assoc. Prof. Kamel Mehdi and Nawel Glau Preparatory Institute for Engineering Studies El Manar (IPEIEM),University of Tunis EL Manar (UTM), Tunisia
18:00-18:15	(C030-A) Single damage identification in metallic structure based on particular swarm optimization algorithm Heller G. Sánchez A. and Fabian R. Nova A. UNIVERSIDAD INDUSTRIAL DE SANTANDER - COLOMBIA
18:15-18:30	(C101) A Passive Flow Control Method Based on the Coandă Effect Assoc. Prof. Florin Frunzulica , Alexandru Dumitrache, Octavian Preotu "POLITEHNICA" University of Bucharest, Romania
18:30-20:00	Best Presentation Award & Session Group Photo &Dinner

Session B-1
“Control Science and Mechanical Engineering”
Chairperson:
VENUE: Room #2-712

13:00-13:15	(C3024-A) Low Cycle Fatigue Life Prediction of Circumferentially Notch Round Bars Assist. Prof. Richa Agrawal , Rashmi Uddanwadiker, J. Veerababu, Sunil Goyal, R.Sandhya, Pramod Padole Pillai College of Engineering, Mumbai India
13:15-13:30	(C073) Study on the Mechanical Properties of Dissimilar Friction Stir Welding of AA 7075 T6 and AZ 31B Alloys Dr. Musa BİLGİN , Şener KARABULUT, Ahmet ÖZDEMİR Hacettepe University, Turkey
13:30-13:45	(C067) Cylindrical Grinding Performance Evaluation Mr. Mohd Azher Mohd Mustafa Thanedar , Suhas Joshi and Rajkumar Singh Bharat Forge Ltd. India
13:45-14:00	(C1023) Small postponed mechanism for delay-unfolding based on pressure device Mr. Yang Jinpeng , Chen Xiaoguang, Xu Hanzhong, Zou Xiaofeng, Jiao Shenghai, Sheng Xi Beijing Institute of Space Long March Vehicle, China
14:00-14:15	(C145) A numerical modeling study of the effects of various joint boundary conditions on stiffness behaviour of 6-DOF platform' s top plate Mr. Umar Nawaz Bhatti , Sajid Ali, Sikandar Khan, Mamon M. Horoub KFUPM, Saudi Arabia
14:15-14:30	(C012) Coupled Bending-Torsional Dynamic Behavior of a Cantilever Beam Carrying Multiple Point Masses Ms. Alev Kacar Aksongur , Seher Eken, Metin Orhan Kaya Istanbul Technical University, Turkey

14:30-14:45	(C059) Experimental investigation on the splitting of center-notched circular tube Assoc. Prof. Jafar Rouzegar , Mohammad Karimi Shiraz University of Technology, Iran
14:45-15:00	(C089) Structure Damage Detection Based on Ensemble Learning Mr. Ding Huang , Deying Hu, Jingwu He, Yuexi Xiong Beihang University, China
15:00-15:15	(C3006) A Tuning Method for PI Controller for an Integrating System with Time Delay Mr. Haitao Sun , Mohammad Jabbar Mnati, Mohamed Nabil Ibrahim, Alex Van den Bossche Gent University, Belgium
15:15-15:30	(C087) Discontinuities of Displacements at the Junction of Two Half-Strips with Different Boundary Conditions on their Sides Assoc. Prof. Irina V. Menshova , Mikhail D. Kovalenko, Alexander P. Kerzhaev and Tatiana D. Shulyakovskaya Institute of Earthquake Prediction Theory and Mathematical Geophysics RAS (IEPT RAS), Moscow, Russia
15:30-15:45	Best Presentation Award & Session Group Photo & Coffee Break

Session B-2
“Engine Design and Performance Assessment”
Chairperson:
VENUE: Room # 2-712

15:45-16:00	(C081) Research on Reverse Design of Turboshift Engine Based on the Balance of Difficulty Factor Dr. ZHANG Shaofeng , CHEN Yuchun School of Power and Energy, Northwestern Polytechnical University, China
16:00-16:15	(1029-A) Performance Assessment of Jet Engines by Using Advanced Exergy Analysis Dr. Cem Tahsin Yücer National Defense Univ. Air Force NCO Higher Vocational School, Turkey
16:15-16:30	(C104) Parameters analysis of non-linear combustion instability base on the pulsed trigger T-burner technique Assoc. Prof. JIN Bing-ning , WEI Shao-juan and LIU Pei-jin Northwestern Polytechnical University, China
16:30-16:45	(C116) Research on Geometry Configuration/Fuel Distribution of Combustion Chamber of Scramjet Mr. Hao-min Li , Yu-chun Chen, Chun Guan, Yuan Gao, Zhi-hua Wang, Yu-sang Li Northwestern Polytechnical University, China
16:45-17:00	(C118) Performance analysis of mode transition of a triple combined cycle engine Dr. Yuan Gao , Yu-chun Chen, Shao-feng Zhang, Zhi-hua Wang Northwestern Polytechnical University, China
17:00-17:15	(C120) Variable compression component interpolation method for turbine engine Mr. Ren Cheng , Jia Linyuan, Chen Yuchun, Li Meijin, Ding Zhaoxia Northwestern Polytechnical University, China
17:15-17:30	(C121) Performance Calculation and Integrated Mission Assessment of High Speed Turbojet-Scramjet Combined Engine Dr. GAO Yuan , KANG Rui-yuan and CHEN Yu-chun
17:30-17:45	(C125) Turbo Engine Starting Control Law Design and Process Simulation Dr. Tian Tan , Yu-chun Chen, Xin-yue Ma, Chao Zhou Northwestern Polytechnical University, China

17:45-18:00	(C128) Steady State Calculation and Performance Analysis of Variable Ms. Yu-sang Li , Yu-chun Chen, Qiang Zhao Northwestern Polytechnical University, China
18:00-18:15	(C129) Steady State Control Schedule Optimization for A Variable Cycle Engine Mr. Ren Cheng , Jia Linyuan, Chen Yuchun, Li Meijin, Ding Zhaoxia Northwestern Polytechnical University, China
18:15-18:30	(C3010) Design of Control System for Pulse Detonation Engine Dr. ZHANG Wen-long , Li Jiang-hong, Pei Cheng-ming and Fan Wei School of Power and Energy, Northwestern Polytechnical University, China
18:30-20:00	Best Presentation Award & Session Group Photo & Dinner

Session C-1 “Electronic Systems and Communication Technology in Aerospace” Chairperson: VENUE: Room #0-820	
13:00-13:15	(C096) On Fairness in the Network Air Traffic Flow Management with Rerouting Mr. Sadeque Hamdan , Ali Cheaitou, Oualid Jouini, Zied Jemai, Imad Alsyof and Maamar Bettayeb University of Sharjah, United Arab Emirates
13:15-13:30	(C035) Fixed interval scheduling of multiple Earth observation satellites with multiple observations Mr. Xinwei Wang , Roel Leus, Chao Han Beihang University, China
13:30-13:45	(C3016) A Method of Carrier Landing Position Prediction Based on Sinusoidal Model Mr. Jianzhi Wang , Gang Liu and Guanxin Hong Beihang University, China
13:45-14:00	(C051) Reconfiguring NASA Generic Transport Model for Normal Flight Envelope Simulation and Analysis Mr. Ramin Norouzi University of Tehran, Iran
14:00-14:15	(2019-A) Test Platform for Small Satellite Attitude Determination and Control System Ms. Demet Cilden-Guler , Aykut Kutlu, Chingiz Hajiyeve Istanbul Technical University, Turkey
14:15-14:30	(C111) Differentiator-based output-feedback sliding mode control for angle constrained midcourse guidance Dr. Shizheng Wan , Xiaofei Chang, Jie Yan Northwestern Polytechnical University, China
14:30-14:45	(C007) A Game-Based Guidance Law against Higher-Speed Maneuvering Penetrator Using Model Predictive Method Mr. Bo Sun , Xiaofei Chang, Jie Yan, Wenxing Fu School of Astronautics, Northwestern Polytechnical University, P.R. China
14:45-15:00	(C143) Simulation and Evaluation of Civil Aircraft Auto-Landing with Various Guidance Systems Mr. Li ChengXi and Hong GuanXin Beihang University, China
15:00-15:15	(C018) Development of high - temperature position sensors for control of actuators in aerospace systems Prof. Yongdae Kim , Hyun Young Choi

	Kyungil University, Rep. of Korea
15:15-15:30	(C070) Design of a vibration isolator for the inertial navigation system of an autopilot dedicated to the operation of light drones Prof. Zhaoheng Liu , Mourad Kedadouché, Sun Yulan, Marc Thomas, Guillaume Charland-Arcand and Adrien Beck Ecole de technologie supérieure, Université du Québec, Canada
15:30-15:45	Best Presentation Award & Session Group Photo & Dinner

Session C-2
“Materials Science and Engineering”
Chairperson:
VENUE: Room #0-820

15:45-16:00	(C072) Study on the Wire Electrical Discharge Machining of AA 7075 Aluminum Alloy Assist. Prof. Şener Karabulut , Musa Bilgin, Recep Kökçan, Ahmet Özdemir Hacettepe University-Turkey
16:00-16:15	(C091) Optimization of Graded Metallic Foam Subjected to Impulsive Loading through DOE Approach Mr. Ali Farokhi Nejad , Amin Bassiri Nia, Mohd Yazid Yahya and Amran Ayob POLITECNICO DI TORINO, TURIN, ITALY
16:15-16:30	(C1008) Microstructure evolution and dynamic recrystallized model of 5083 aluminum alloy during hot deformation Dr. Jiabin Zhang ; Shihong Lu Nanjing University of Aeronautics and Astronautics & China
16:30-16:45	(C114) A Cell Equalization Method Based on Resonant Switched Capacitor Balancing for Lithium Ion Batteries Mr. Ali Farzan Moghaddam and Alex Van den Bossche Gent University, Belgium
16:45-17:00	(C1027) Thick-walled functionally graded material cylinder under thermo-mechanical loading Assoc. Prof. Hamid Dalir , Mohsen Damadam; Reza Moheimani, Ali Nayebi Purdue University, USA
17:15-17:30	(C1028) Design of Intake Manifold and Selection of Suitable Material for Intake Manifold Gasket for Student Formula Assist. Prof. Niti Kammuang-lue , Jirawat Boonjun Department of Mechanical Engineering, Faculty of Engineering, Chiang Mai University, Thailand
17:30-17:45	(C3021-A) Effect of Ply Angle on the Stress analysis of composite pressure vessels by filament winding Prof. Najim A.Saad , li A. Alzubaidi, Tamara Saif Babylon university, Iraq
17:45-18:00	(C110) Parametric Study of the Compressive Buckling Load of Composite Panels with I-shape Stiffeners Dr. Yuequan WANG , Shuhua ZHU Nanjing University of Aeronautics and Astronautics, China
18:00-18:15	(C034) An Active Cell Equalization Technique for Lithium Ion Batteries Based on Inductor Balancing Mr. Ali Farzan Moghaddam and Alex Van den Bossche Gent University, Belgium
18:15-18:30	(C1019-A) Investigation of Thermal Contact Resistance of Fibrous Material in Contact with

	Super-alloys Surface Prof. Nam Seo Goo , Vinh Tung Le and Jae Young Kim Konkuk University, Republic of Korea
18:30-20:00	Best Presentation Award & Session Group Photo & Dinner

Symposium-1

“Approximation Theory and Special Functions - 5th Series”

Chairperson: Prof. Oktay Duman
VENUE: Room #0-818

13:00-13:15	(MS003-A) Harmonic functions in terms of two-variable orthogonal polynomials on the triangle Assoc. Prof. Rabia Aktas and Fatma Tasdelen Ankara University, Turkey
13:15-13:30	(MS009-A) Harmonic functions in terms of two-variable orthogonal polynomials on the triangle Mr. Ismail Aslan and Oktay Duman TOBB University of Economics and Technology/ Hacettepe University, Turkey
13:30-13:45	(MS002-A) On Generalized Picard integral Prof. Ali Aral , Tuncer Acar and Firat Ozsarac Kırıkkale University, Turkey
13:45-14:00	(MS006-A) Some Series Identities For a Class of Polynomials Suggested by Laguerre Polynomials Mehmet Ali Ozarslan and Dr. Cemaliye Kurt North Cyprus
14:00-14:15	(MS012-A) Recent convergence methods of functions defined on time scale Dr. Ceylan Turan Yalçın TOBB University of Economics and Technology, Turkey
14:15-14:30	Free Talk

Symposium-2

“Approximation Theory and Special Functions - 5th Series”

Chairperson: Prof. Ali Aral
VENUE: Room #0-818

14:30-14:45	(MS001-A) On Cheney and Sharma operators Prof. Gulen Bascanbaz-Tunca , Ayşegül Erençin Ankara University, Turkey
14:45-15:00	(MS004) The Meixner polynomials in several variables Dr. Nejla Ozmen and Esra Erkus-Duman Düzce University, Turkey
15:00-15:15	(MS014-A) Note on Baskakov Operators Preserving e^{2ax} , $a > 0$ Ms. Ovgu Gurel Yilmaz , Vijay Gupta and Ali Aral Ankara University, Turkey
15:15-15:30	(MS008-A) A result for multivalued almost F_{δ} contraction Dr. Özlem Acar Mersin University, Turkey
15:30-15:45	Group Photo & Coffee Break

“Approximation Theory and Special Functions - 5th Series”

Symposium-3

Chairperson: Prof. Esra Erkus-Duman

VENUE: Room #0-818

15:45-16:00	(MS010-A) Some Convergence Methods on Max-Min Operators Ms. Turkan Yeliz Gokcer and Oktay Duman TOBB University of Economics and Technology, Turkey
16:00-16:15	(MS005) Generating functions for k-hypergeometric functions Dr. Duriye Korkmaz-Duzgun and Esra Erkus-Duman Kafkas University, Turkey
16:15-16:30	(MS007-A) Simultaneous approximation by exponential type Bernstein operators with k-th order Kantorovich methods Dr. Tuncer Acar , Ali Aral and Firat Ozsarac Selçuk University, Turkey
16:30-16:45	(MS011-A) Reconstruction of Baskakov operators preserving some exponential functions Mr. Firat Ozsarac , Ali Aral and Tuncer Acar Kırıkkale University, Turkey
16:45-17:00	(MS013-A) The comparison of the dynamical systems on the Sierpinski Gasket obtained by different folding maps Ms. Nisa Aslan , Mustafa Saltan and Bünyamin Demir Anadolu University, Turkey
17:00-18:30	Discussion and Free Talk
18:30-20:00	Best Presentation Award & Session Group Photo & Dinner

Tutorial-1

“Isomathematics”

Chairperson: Prof. Svetlin Georgiev

Sorbonne University, Paris, France

VENUE: Room # 1-820

13:00-14:00	(MT102) Introduction to Conformable Iso-Differential Calculus Svetlin G. Georgiev Sorbonne University, France
14:00-15:00	(MT103) On the Santilli's iso-hyper-mathematics and hyper-numbers Thomas Vougiouklis Democritus University of Thrace, Greece
15:00-15:30	(MT105) Stochastic Wavepacket Tessellation of Atomic Constitution and Periodic Table in Structural $R^3 \times SO(3)$ Configuration Space Erik Trelle, Godfrey Akpojotor, Samuel Edeagu and Alexander Animalu Linköping University, Sweden; Delta State University, Nigeria; University of Nigeria
15:30-15:45	Coffee break
15:45-16:45	(MT208) Mathematics and meaning in the Dirac equation Peter Rowlands University of Liverpool, UK
16:45-17:45	(MT106) Reflections on the significance of the unit in isomathematics as approached from deep Fibonacci mathematics

	Stein Johansen Norwegian University of Science and Technology, Norway
17:45-18:30	(MT206) Holographic Viscous Dark Energy Described by Modified Equation of State and Scalar Field G. S. Khadekar Department of Mathematics, Nagpur University, India
18:30-20:00	Best Presentation Award & Session Group Photo & Dinner

Date: Jul. 12, 2018(Tuesday)

Time: 9:00-18:30

Time	Activity	Representative VENUE: Room # 0-821
09:00-09:05	Opening Remarks	Prof. Dashnor Hoxha , <i>Orleans University, France</i>
09:05-09:50	Keynote Speech-III	“Effective Thermal Properties of Heterogeneous Materials from far Field Contactless Temperatures Measurements” Prof. Dashnor Hoxha , <i>Orleans University, France</i>
09:50-10:20	Plenary Speech-II	“Understanding the Behaviour of V-band Clamps” Prof. Simon Barrans , <i>University of Huddersfield, UK</i>
10:20-10:50	Coffee Break & Group Photo	
10:50-11:20	Plenary Speech-III	“On the Solution of KdV-like Equations by the Optimal Perturbation Iteration Technique” Prof. Necdet Bildik , <i>Celal Bayar University, Turkey</i>
11:20-11:50	Plenary Speech-IV	“” Prof. Hamid Bahai , <i>Brunel University, UK</i>
12:00-13:00	Lunch	
Session A-3		

“Power System Modeling and Analysis in Aerospace”

Chairperson:

VENUE: Room # 2-502

13:00-13:15	(C102) Applications of the Coanda Effect in Aeronautics Prof. Alexandru Dumitrache , Florin Frunzulica, Octavian Preotu Institute of Mathematical Statistics and Applied Mathematics Bucharest, Romania
13:15-13:30	(C077) Study on Three-Dimensional Viscous Flow of An Aero Centrifugal Pump Impeller Based on Unstructured Hexahedron Grid Dr. Liu Xianwei , Li Huacong, Shi Xinxing and Fu Jiangfeng Northwestern Polytechnical University, China
13:30-13:45	(C2025) Performance Analysis of Aviation Fuel Gear Pump Based on AMESim Dr. Linxiong Hong , Huacong Li, Hongliang Xiao and Siwei Ren School of Power and Energy, Northwestern Polytechnical University, China
13:45-14:00	(C113) Rocket-Based Combined-Cycle Inlet Researches in Northwestern Polytechnical University Prof. Lei Shi , Guoqiang He, Fei Qin, Xianggeng Wei and Peijin Liu Northwestern Polytechnical University, P.R. China
14:00-14:15	(C2017) The flow simulation of a fuel centrifugal pump with integrated inducer and impeller influenced by inlet flow ejector Dr. LI Jia Chang'an University, Xi'an, Shannxi, China
14:15-14:30	(C1016) Dynamic Mechanical Properties of a Modified Double-base Propellant Dr. Chaoxiang Sun , Wen Pan, Hanzhong Xu, Shenghai Jiao, Mei Sheng Beijing Institute of Space Long March Vehicle, China
14:30-14:45	(C1031) A Novel Methodology to Estimate Solid Propellant Temperature Before Ignition Mr. Mustafa Ozcatalbas , Volkan Coskun, Emre Kutukceken and Bulent Acar Roketsan Inc. Turkey
14:45-15:00	(C1021) Linear friction welding for near net shape manufacturing of titanium alloy Ti-6Al-4V aerospace components Dr. Anthony R. McAndrew and Bertrand C. D. Flipo TWI Ltd., United Kingdom
15:00-15:15	(C078) Hydrodynamic Lubrication Performance Analysis of the Self-Cooled Bearing Structure in Aero-Gear Pump Considering the Cavitation Effect Dr. Jiaying Zhu , Huacong Li, Jiangfeng Fu, Xianwei Liu Northwestern Polytechnical University, China
15:15-15:30	(C079) Layout Optimization of Solar Array for Stratospheric Airship with Thermal Effect Mr. Yifei Wu , Mingyun Lv, Erqiang Cui, Ming Zhu Beihang University, China
15:30-15:45	Best Presentation Award & Session Group Photo & Coffee Break

Session A-4

“Power Electronics Technology and Communication Engineering”

Chairperson:

VENUE: Room #2-502

15:45-16:00	(C009-A) IMPROVING THE EFFICIENCY OF VAWT THROUGH AUTOMATIC SHIELDING Dr. Jihad Rishmany , Nicolas Saba, Issam Tawk, Macole Sabat and Michel Daaboul
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	University of Balamand, Lebanon
16:00-16:15	(C127) Research on Rapid Response Flow Measurement Technology Based on Laminar Flow Meter Dr. WANG Xiaolu , CHEN Yuchun , ZHANG Shaofeng, ZHANG Wenlong School of Power and Energy, Northwestern Polytechnical University, China
16:15-16:30	(C3023) Single layer printed photodetector based on MEH:PPV-MoS ₂ quantum dots composite Dr. Memoon Sajid , Soo Wan Kim, Hyun Bum Kim, Kyung Hyun Choi Jeju National University, Republic of Korea
16:30-16:45	(C053) Design of Repetitive Controller Using Optimization in Frequency Domain with Maximum Gain Constraints Dr. Pitcha Prasitmeeboon King Mongkut's Institute of Technology Ladkrabang, Thailand
16:45-17:00	(C054) A Multi-Band Frequency and Pattern Reconfigurable Antenna for Wi-Fi/WiMAX and WLAN applications Assoc. Prof. Sulakshana Chilukuri , Pandu Rangaiah Y, Keshav Dahal and Anjaneyulu Lokam Department of Electronics and Communication Engineering, Vardhaman College of Engineering, India
17:00-17:15	(C076) Design and Development of Ground Station for Advanced Weather Sensor Network for Rainmaking Process in Thailand Dr. Peeramed Chodkaveekityada and P. Wardkein King Mongkut's Institute of Technology Ladkrabang, Thailand
17:15-17:30	(C2011) Microwave Absorbing Heat Flow Simulation System for Vacuum Thermal Test of Large Microwave Antenna Assoc. Prof. Yuwei Sun , Xiaoning Liu, Boying Lin Beijing Institute of Satellite Environmental Engineering, China
17:30-17:45	(C032) A Tuning Method for the Derivative Filter in PID Controller with Delay Time Mr. Haitao Sun , Mohammad Jabbar Mnati, Mohamed Nabil Ibrahim, Alex Van den Bossche Gent University, Belgium
17:45-18:00	(C010-A) INVESTIGATION AND MODIFICATION OF THE TAILORING METHOD IN THE PRESS HARDENING PROCESSES USING COUPLED THERMO-MECHANICAL SIMULATION Dr. Nicolas Saba , Jihad Rishmany, Michel Daaboul and Issam Tawk University of Balamand, Lebanon
18:00-18:15	(C024) Design Method of Rough Terrain Detection and Avoidance in Unknown Environment for Space Rover Mr. Sousuke Chiba, Prof. Kenji Uchiyama and Kai Masuda Nihon University, Japan
18:15-18:30	(C060) Nonhomogeneous Boundary Value Problem for a Semi-strip Clamped at the End: Exact Solution Assoc. Prof. Alexander P. Kerzhaev Institute of Earthquake Prediction Theory and Mathematical Geophysics, Russian Academy of Sciences, Russia
18:30-20:00	Best Presentation Award & Session Group Photo & Dinner

Session B-3

"Fluid Mechanics and Applications"

Chairperson:

VENUE: Room #2-712

13:00-13:15	(C3001) Numerical study of wind loads on a solar panel at different inclination angles Dr. Onur Yemenici , Muhammed Osman Aksoy Uludag University, Turkey
13:13-13:30	(C008-A) Experimental observation of electrohydrodynamic conduction and injection in a dielectric liquid Assoc. Prof. Michel Daaboul , Nicolas Saba, Jihad Rishmany, and Christophe Louste University of Balamand, Lebanon
13:30-13:45	(C050) Jet-Wing Interaction Flow Field Study for Missiles in Supersonic Free Streams Dr. Longfei Li , Jiangfeng Wang, Yuhan Wang, Faming Zhao Nanjing University of Aeronautics and Astronautics, China
13:45-14:00	(C2006-A) EFFECTIVENESS OF PASSIVE BLEEDING AS A FLOW CONTROL METHOD FOR THE FLOW STRUCTURE ON LOW TO MODERATE SWEPT DELTA WINGS Mr. Kayacan Kestel , Burcu Ramazanlı, M. Metin Yavuz Middle East Technical University, Turkey
14:00-14:15	(C3011-A) Development of LBM for numerical simulation of axisymmetric compressible flow using finite volume method Dr. Ramin Kamali Moghadam , Nasrin Sahranavard Fard and Hamed Jalali Aerospace Research Institute, Ministry of Science and Technology, Iran
14:15-14:30	(C036) NUMERICAL SOLUTION OF THE FLOW FIELD AROUND A PROLATE SPHEROID Mr. Emre Yüca and Mehmet Şerif Kavsaoğlu Anadolu University, Faculty of Aeronautics and Astronautics, Turkey
14:30-14:45	(C1038) Uncertainty Quantification of $k-\omega$ Turbulence Model for Hypersonic Flow Dr. Yatian Zhao , Chao Yan, Hongkang Liu Beihang University, China
14:45-15:00	(C3008-A) Minihelicon plasma discharge simulation for potential electrodeless Prof. Md Mahbubur Rahman , Prof. Ighor Uzhinsky SKOLKOVO INSTITUTION OF SCIENCE AND TECH. ,Russia
15:00-15:15	(C044) CFD analysis for the performance of Gurney flap on the aerofoil and vertical axis turbine Yan Yan , Eldad Avital, Theodosios Korakianitis Queen Mary University of London, London
15:15-15:30	(C057) CFD based stochastic optimization of Pelton turbine bucket in Stationery condition Mr. Suyesh Bhattarai , Keshav Dahal, Parag Vichare, Bhupesh Mishra University of the West of Scotland, UK
15:30-15:45	Best Presentation Award & Session Group Photo & Coffee Break

Session B-4

“Aircraft Structure Design and Optimization”

Chairperson:

VENUE: Room #2-712

15:45-16:00	(C1040) Process Development for the In-house Manufacture of Aircraft Cabin and Cargo Composite Panels Assoc. Prof. Michael A. Saliba , Ian Attard University of Malta, Malta
16:00-16:15	(C115) Influence of the Landing Gear Casing on A High Lift Aircraft

	Mr. Zhihua Wang , Yuchun Chen, Yuan Gao and Haomin Li Northwestern Polytechnical University, School of Power and Energy, China
16:15-16:30	(C022) The flow characteristics in early stages of the close tandem symmetrical airfoils Assoc. Prof. Yoshifumi Yokoi National Defense Academy of Japan, Japan
16:30-16:45	(C071-A) Hybrid Optimization Approach Combining an Efficient and Global Evolutionary Algorithm with a Gradient-Based Method for Airfoil Design Problems Assoc. Prof. Masahiro Kanazaki and Attaphone Aryarit Tokyo Metropolitan University, Japan
16:45-17:00	(C069) Design Research of Fuselage Structure with Specified Stiffness Properties Mr. Yang Yongze , Xiong Yuexi, He Jingwu Beihang University, China
17:00-17:15	(C2024) Investigation of Aeroelastic Stability on AGARD 445.6 Wing at Transonic Regime Mr. Mustafa Ozcatalbas , Bulent Acar, Sitki Uslu Roketsan Inc. Turkey
17:15-17:30	(C105-A) Examining the Factors Affecting Flight Training and Planning: Identifying VFR Flight Hours for Hasan Polatkan Airport by Studying METAR Reports Assoc. Prof. Savas S. ATES , Batuhan BALLI Anadolu University, Turkey
17:30-17:45	(C1022) Survivability Analysis of Small Single Pawn Scout Unmanned Aerial Vehicle Ms. Buxian Xiong , Qing Han, Zirui Wang Aeronautical College, Northwestern Polytechnical University, Shanxi, Xi'an, China
17:45-18:00	(C3019) Dewetting Stress of Solid Propellant under Uniaxial Tensile Loading Assoc. Prof. Jin Bing-ning , Liu Xin-guo, Liu Pei-jin, Wang Zhe-jun and Han Yong-heng Northwestern Polytechnical University, China
18:30-20:00	Best Presentation Award & Session Group Photo & Dinner
Session C-3 "Aircraft Design and Spacecraft" Chairperson: VENUE: Room #0-820	
13:00-13:15	(C046) RF Source Localization using Unmanned Aerial Vehicle with Particle Filter Mr. Mehmet Hasanzade , Ömer Herekoğlu, Ramazan Yeniçeri, Emre Koyuncu, Gökhan İnalhan Istanbul Technical University / Istanbul, Turkey
13:15-13:30	(C1025) Research on Aeroheating of Complicated Hypersonic Reentry Vehicles Dr. Qin Xuguo , Shui Yongtao, Wang Yonghai, Wang Fei, Li Qiang Beijing Institute of Space Long March Vehicle, China
13:30-13:45	(C1026) Research on Optimal Guidance Law with Regulable Guidance Coefficient Satisfying Multiple Constraints Dr. Li Qiang , Shui Yongtao, Liu Tao, Wang Fei, Qin Xuguo Beijing Institute of Space Long March Vehicle, China
13:45-14:00	(C029) Comparison of Generated Flight Delays in Continuous Descent and Step-down Approaches Mr. Ramin Norouzi University of Tehran, Iran
14:00-14:15	(C080) Transition Flight Control and Test of a New Kind Tilt Prop Box-Wing VTOL UAV Assoc. Prof. Deng Yangping , Gao Honggang

	Northwestern Polytechnical University P.R. China
14:15-14:30	(C1034) Wall temperature effects on hypersonic aerodynamics of the Mars entry capsule Dr. Kang Zhong , Chao Yan, Xiaoyong Wang Beihang University, China
14:30-14:45	(C100) Removal of Organic Contaminants by Argon Plasma Jet: A Perspective Treatment of Urine on Spacecraft Dr. Peerapong Pornwongthong King Mongkut's University of Technology North Bangkok ,Thailand
14:45-15:00	(C2018-A) Attitude Estimation by SVD/EKF using Reformed Measurements and Decomposed Noise Covariance Ms. Demet Cilden-Guler , Chingiz Hajiyev Istanbul Technical University, Turkey
15:30-15:45	Best Presentation Award & Session Group Photo & Coffee Break

Session C-4 "Image Processing and Application"

Chairperson:
VENUE: Room # 0-820

15:45-16:00	(M015-A)Data Mining in A Smart Traffic Light Control System Based on Image Processing and KNN Classification Algorithm Assoc. Prof. Adem Alpaslan Altun , Abdullah Yusefi Selcuk University, Konya, TURKEY
16:00-16:15	(M067)Implementing Virtual 3D Model and Augmented Reality Navigation for Library in University Asst. Prof. Dr. Pijitra Jomsri Suan Sunandha Rajabhat University, 1 U-Thong nok Road, Dusit, Bangkok 10300 Thailand
16:15-16:30	(M043-A)Detection of Damaged Area of Insects in Agricultural Areas by CNN Prof. Cemil Sungur , Akif Durdu Selcuk University, Konya, TURKEY
16:30-16:45	(M063)Characterizing the spatial distribution of geolocated categorical values Prof. Pedro J. Zufiria , and Miguel Á. Hernández-Medina Universidad Politécnica de Madrid, Spain
16:45-17:00	(M2001-A)Comparison Of Obesity Prevalence Using Body Mass Index, Waist Circumference And Waist To Hip Ratio Prof. Asma Ahmad Shariff , and Suhana Japar University of Malaya, Malaysia
18:30-20:00	Best Presentation Award & Session Group Photo & Dinner

Session-D-1 "Mathematical Theory and Calculation"

Chairperson:
VENUE: Room # 1-820

13:00-13:15	(M007-A)The Green Rings of the Δ -associative algebras Dr. Dong Su Beijing University of Technology, China
13:13-13:30	(M009-A) Wavelet estimations for noncompact density functions with L^1 risk

	Dr. Kaikai Cao Beijing University of Technology, China
13:30-13:45	(M017) A Unified Approach to Integration Theory Assoc. Prof. Mangatiana A. ROBDERA University of Botswana, Botswana
13:45-14:00	(M027-A) Extra Derivative Multistep Methods with Trigonometrically-Fitting for Oscillatory Problems Prof. Fudziah Ismail , Sufia Zulfa Ahmad and Norazak Senu DEPARTMENT OF MATHEMATICS, UPM, SERDANG, SELANGOR, 43400, MALAYSIA
14:00-14:15	(M041) On the Solution of KdV-like Equations by the Optimal Perturbation Iteration Prof. Necdet Bildik Manisa Celal Bayar University -TURKEY
14:15-14:30	(M051) On parallel curves obtained by a space curve in E^3 Dr. Muhammed Talat SARIADYIN , Talat Korpınar Selcuk university, Mus alparslan university, Turkey
14:30-14:45	(M040-A) Mathematics, Topology, Algebraic Topology, Digital Topology, Category Theory, Functional Analysis Assoc. Prof. Simge Öztunç Manisa Celal Bayar University, TURKEY
14:45-15:00	(M062) Some Divisibility Traits On Valuated Binary Trees Prof. Xingbo WANG , Hongqiang GUO Foshan University, China
15:00-15:15	(M064) A fixed point theorem for quasi – contractive mappings on cone metric space with Banach algebras without assumption of normality Dr. Eriola Sila , Elida Hoxha, Silvana Lifta University of Tirana, Tirana, Albania
15:15-15:30	(M021-A) On Investigation of Static Two-Dimensional Models for Thermoelastic Piezoelectric Shells Assoc. Prof. Gia Avalishvili I. Javakhishvili Tbilisi State University, Georgia
15:30-15:45	Best Presentation Award & Session Group Photo & Coffee Break

Session D-2

“Mathematical Modeling and Physical Mathematics”

Chairperson:

VENUE: Room # 0-818

15:45-16:00	(M030-A) On the Performance of Robust Gm Estimator as a Remedy to Multicollinearity Which is Due to High Leverage Collinearity Enhancing Observations Prof. HABSHAH MIDI , SHELAN ISMAEEL Universiti Putra Malaysia, Malaysia
16:00-16:15	(M035-A) Leveraging PLS Predict Approach to Assess the Predictive Relevance of a Semantic KMS Model Mr. Azmi Jaafar , Abdulmajid Babangida Umar University Putra Malaysia, Malaysia
16:15-16:30	(M036-A) Artificial Neural Network Modeling for Chromium (VI) Adsorption Capabilities of Nanocomposite Materials Dr. Türkan Altun and Serpil Edebalı

	Selcuk University, Konya, TURKEY
16:30-16:45	(M008-A)Weak Gabor duals of Type I in Vector-valued Subspace Dr. Jing Zhao Beijing University of Technology, China
16:45-17:00	(M026-A) Accelerated Failure Time Model for Time-To-Event-Data Prof. Noor Akma Ibrahim and Mostafa Karimi Universiti Putra Malaysia, Malaysia
16:45-17:15	(M031)The stress state of a finite elastic cylinder under its proper weight Ms. Anastasiia Filipchuk , Protserov Yuriy, Vaysfeld Natalya Odesa Mechnikov University, str. Dvoryanskaya, 2, 65082, Odesa, Ukraine
17:15-17:30	(M039-A) The non-linear vibrations of the pipe model conveying fluid with fractional damping term Assoc. Prof. Dr. Duygu Dönmez Demir , and B. Gültekin Sınır Manisa Celal Bayar University, Turkey
17:30-17:45	(M046-A) The estimation of concrete compressive strength with artificial neural networks model Assoc. Prof. Ali DEMİR , and Duygu DÖNMEZ DEMİR Manisa Celal Bayar University/Turkey
17:45-18:30	Discussion and Free talk
18:30-20:00	Best Presentation Award & Session Group Photo & Coffee Break

Tutorial-2

“Isomechanics and Isochemistry”

Chairperson: Prof. Jan Rak and Prof. Anil A. Bhalekar

*Group Leader, CERN & R. T. M. Nagpur University, Amravati Road Campus, Nagpur***VENUE: Room # 0-818**

13:00-13:30	(MT201) Title to be announced Jan Rak Renaissance University, Prague
13:30-14:30	(MT210) Mathematical, Theoretical and Experimental Aspects of Santilli's Synthesis of the Neutron from Hydrogen Chandrakant S. Burande Nagpur University, India
14:30-15:30	(MT202) Experimental Evidence on the Synthesis of Neutrons and Neutroids from a Hydrogen Gas Simone Beghella Bartoli Thunder Energies Corporation, U.S.A
15:30-15:45	Coffee break
15:45-16:45	(MT204) Hadronic Mechanics of Light Nuclides. Stable versus Unstable Ones Anil A. Bhalekar and R.M. Santilli Nagpur University, India; TEC, USA
16:45-17:15	(MT302)Apparent experimental confirmation of pseudoprotons And its applications Ruggero Maria Santilli TEC, USA

17:15-17:45	(MT211)Preliminary comment about spin-statistic and Santilli new negative-charge-pseudoproton. Zbigniew Oziewicz University of Mexico, Mexico
17:45-18:30	Summary of meeting and discussions Ruggero M. Santilli and others TEC, U.S.A.
18:30-20:00	Best Presentation Award & Session Group Photo & Coffee Break

Poster Presentation

Date: Jul. 12 2018(Tuesday)

Time: 17:00-18:30

Chairperson:

VENUE: Lobby

(C041)Dynamic Analysis of the Inflatable Net System for Space Capture

Mr. Hao Liu, Cheng Wei, Yang Zhao, Shunli Li, Chunlin Tan, Yongjian Liu

Harbin Institute of Technology, China

(C040)Research on the suppression effect law of different baffle positions on liquid sloshing in spherical tank

Mr. Liang Ma, Cheng Wei, Yang Zhao

Harbin Institute of Technology, China

(C011)An adaptive control approach for a flexible hypersonic glide vehicle

Mr. Erkang Chen, Wuxing Jing, Changsheng Gao, Zhao Zhang

Harbin Institute of Technology, China

(C1012)Rapidly Sampling-Based Trajectory Planning for Spacecraft Proximity

Mr. Ding Zhou, Zhenhua Yu, Yanquan Zhang, Shunli Li

Harbin Institute of Technology, China

(C037)Firing Data Design for the Midcourse Interceptor with Complex Flight Program

Mr. Zhao Zhang, Changsheng Gao, Wuxing Jing, Erkang Chen

Harbin Institute of Technology, China

(C043)Analysis for UAV Heuristic Tracking Path Planning Based on Target Matching

Mr. Changwu Zhang, Yuchen Tang and Hengzhu Liu

National University of Defense Technology, China

(C042)Resident Space Objects Streak Extraction and Angular Measurement Error Analysis Base on Space Image Synthesis System

Ms. Wei E, Cheng Wei, Yaoxiang Jing, Dianjun Wang, Yang Zhao

Harbin Institute of Technology, China

(C063)Development of an Adaptive Radial Basis Function Neural Network Tracking Control for the Yaw Motion of an Unmanned Helicopter

Assoc. Prof. Ying-Chih Lai, Tri-Quang Le, Chien-Hong Lin and Yi-Ren Ding

Feng Chia University, Taiwan

(C026)Quaternion-based Control of Fixed-Wing UAVs using Logarithmic Mapping

Assoc. Prof. Espen Oland

UiT - The Arctic University of Norway, Norway

(C1030)Analysis of tooth profile tolerance in high-precision end-toothed disc design

Prof. Jianrun Zhang, Beibei Sun, Xi Lu

School of Mechanical Engineering, Southeast University, Nanjing, Jiangsu, China

(C1036)One new method for identification of Distributed Dynamic Load Based on Modal Coordinate Transformation

Assoc. Prof. Jinhui Jiang, Huangfei Kong and Ke Wang

Nanjing University of Aeronautics and Astronautics, China

(C1033)Prediction of the Resonant Fatigue Residual Life of Stiffened Panel by Measuring Frequency

Assoc. Prof. WANG Ke, XIONG Feng, JIANG Jinhui

Nanjing university of Aeronautics and Astronautics, CHINA

(C2005)Minimum-fuel Powered Descent Guidance for Mars Landing

Dr. Bai Chengchao, Guo Jifeng, Zheng Hongxing

Harbin Institute of Technology, China

(C2016)Non-contact Guided Wave Excitation in Composite Plate by the Ultrasound Transmitter

Dr. Michal Jurek, Pawel Kudela, Maciej Radzienski, Wieslaw Ostachowicz

Polish Academy of Science, Poland

(C2021)A Hybrid Trajectory Planning Algorithm for UAVs in Cluttered Environments

Dr. Hongxing Zheng, Jifeng Guo, Peng Yan

Harbin Institute of Technology, China

(C090)A Fast PSO Algorithm Based on Alpha-stable Mutation and Its Application in Aerodynamic Optimization

Dr. Fan Huayu, Zhan Hao

School of Aeronautics, NWPU, Xi'an, P. R. China

(C093-A)Simulation of multi-cavity micro-injection system for reducing cavity filling deviation

Mr. Beom Rae Kim, Mr. Yongchul Shin and Seung Mo Kim

Seoul National University, South Korea

(C117)Research on Time-Varying Meshing Stiffness of Helical Gear considering Tribo-Dynamic Behavior

Dr. Dong Huili and Niu tao

Beijing Research Institute of Precise Mechatronic Beijing, China

(C131-A)Dynamic Behavior Analysis of Magnetorheological (MR) Damper and Experimental Validation of the Modified Bouc-Wen Numerical Model

Dr. Said Boukerroum, N. Kheznadji and N. Hamzaoui

Laboratoire de Mécanique Avancée (LMA), USTHB, Algiers, Algeria

(C123)A Novel Looseness Detection Method for Hydraulic Pipeline Clamp Based on statistical analysis

Ms. Na Xiao, Qin Wei, Ling Lu, Feng Yang

Wuhan University of Technology, China

(C122)Real-time Data Fusion Method Research Based on Different Measurement Element of Reconnaissance Radar

Guanhui Liang, Guizhou Lv, Yafeng Meng

Army Engineering University Shijiazhuang Campus, China

(C142-A) Comparison of the Performance Characteristics of Turbines with Local Sweep Blade for a Small Axial Supersonic Impulse Turbine

Dr. Sooin Jeong, Byoungik Choi, Kuisoon Kim, Hanggi Lee

Pusan National University, Republic of KOREA

(C134-A) Prediction of Progressive Failure for Curved Composite Laminates under Mode I and Mode II Loading

Mr. Seunggu Kang, Jaemoon Im, Sanghyup Lee, Kwangbok Shin

Hanbat National University, Rep. of Korea

(C099) A Test Method for Testing the Flow of Air Oxygen Supply Equipment

Dr. Haichuan Jin, Dongsheng Jiang, Guiping Lin, Jun Huang, Xueqin Bu and Yu Zeng

Beihang University, China

(M006) Modeling of the HFMD with the Carrier Population

Mr. Ruzhang Zhao

Tsinghua University, China

(M065) The parallel implementation of simultaneous methods for finding the polynomial zeros

Assoc. Prof. Eglantina Kalluci, Fatmir Hoxha, Brikena Preni

TIRANA, ALBANIA

(C058) The use of inflatable structures for the removal of spacecraft from orbit

Dr. Vsevolod V. Koryanov, Victor Kazakovtsev, Alexey G. Toporkov, Anton A. Nedogorok

Bauman Moscow State Technical University, Russia

(C1011) Digital Structure Matching Verification Method between large Spacecraft and On-Orbit Heat Flux Simulation Device

Assoc. Prof. Jihui Xie, Jing Wang, Xinming Su, Jiayong Qin

Beijing Institute of Satellite Environmental Engineering, China

18:30-20:00

Best Presentation Award & Session Group Photo & Dinner

Listener

(L001) **Prof. Marc THOMAS**

ETS, Canada

(L002) **Mr. Ali Karami**

Persian, Iran

(L003) **Mr. Tianjiao Liang**

Chengdu Aircraft Design & Research Institute of Aviation Industry Corporation, China

(L005) **Ms. Huiqin Gao**

Chengdu Aircraft Design & Research Institute of Aviation Industry Corporation, China

(L006) **Mr. Yong Tang**

Chengdu Aircraft Design & Research Institute of Aviation Industry Corporation, China

(L007) **Dr. Yanxiong Wang**

Chengdu Aircraft Design & Research Institute of Aviation Industry Corporation, China

(L008) **Prof. Peter Monka**

FMT TU Kosice with the seat in Presov, Slovakia

(L009) **Assoc. Prof. Rashmi Uddanwadiker**

Visvesvaraya National Institute of Tehnology, Nagpur, India

(L010) **Prof. SUI QINGMEI**

Shandong University, China

(L011) **Ms. ZIRUI WANG**

Northwestern Polytechnical University, China

(L012) **Prof. Beibei Sun**

Southeast University, China

(L013) **Assoc. Prof. Xi Lu**

Southeast University, China

(L014) **Mr. Emmanuel kaku**

Statistics officer at GC health center, Ghana

(L016) **Ms. Suhana Japar**

University of Malaya, Malaysia

(L017) **Prof. Hilda María Colín Garcían**

Universidad Nacional Autonoma de Mexico, Mexico

One Day Visit-Budapest

Date: Jul. 13, 2018(Friday)

Time: 9:00-16:00

Attention:

- This visit will charge **100USD** for each. (Pay to join before June 26, 2018);
- or you could choose to enjoy free time on July 13 to explore Budapest by yourself;
- **9:00 AM**, pick up at lobby of **Ibis Budapest Centrum**.
- Please be there on time, or you will miss the visit.

Route:

you will visit:

Start from 9:00, Jul. 13: Hősök tere-- City Park -- Széchenyi Thermal Bath -- Budapest Zoo--
Vajdahunyad Vára-- Former Royal Palace--Old Town Hall--Matthias Church--Holy Trinity
Column--Fishermen's Bastion—Citadel-- Great Synagogue-- Orthodox Synagogue
End around 17:00.

Service includes:

- Transportation, Fuel, Parking fees;
- English speaking tour guide;

- Lunch;
- Pick-up & drop-off at gathering spot.

Service excludes:

- Personal expenses (not mentioned above).

Remarks

- The itinerary / duration to visit may change without advance notice depending on group size or unexpected local situation.
- The participants should go to the assembly point by themselves, no pick-up service.