

# Table of Contents

<b>Table of Contents .....</b>	<b>1</b>
<b>Part I ICCSEEA2018 Conference Schedule .....</b>	<b>2</b>
<b>Part II Keynote Speeches.....</b>	<b>10</b>
Keynote speech: The Landscape and Grand Challenges of Scientific Computing .....	10
Keynote Speech: Symmetry lectures for students in information science (Case study for interdisciplinary training).....	12
Keynote Speech: New Symmetries and Fractal-Like Structures in the Genetic Coding System .....	14
Keynote Speech: RNA Quasi-Orthogonal Block Code .....	16
<b>Part III Instructions for Presentations.....</b>	<b>17</b>
<b>Part V Hotel Information .....</b>	<b>18</b>
<b>Part VI Contact Us.....</b>	<b>19</b>

# Part I ICCSEEA2018 Conference Schedule

## Oral Session

Thursday, January 18, 2018

Time	Activity	Location
9:00-9:30	Registration	
9:30-10:00	Opening Ceremony	
10:00-10:30	<b>Keynote Speech: The Landscape and Grand Challenges of Scientific Computing</b> Speaker: Prof. He Matthew	<a href="#"><u>Conference Place</u></a>
10:30-11:00	<b>Keynote Speech: Symmetry lectures for students in information science (Case study for interdisciplinary training)</b> Speaker: Prof. György Darvas	<a href="#"><u>“Slavianskyiv Hall”, Hotel LYBID</u></a>
11:00-11:20	Coffee Break	
11:20-11:35	Alexander Anatolievich Pavlov, Elena Andreevna Khalus, Iryna Vitalievna Borysenko, <b>Planning Automation in Discrete Systems with a Given Structure of Technological Processes</b>	
11:35-11:50	Alexander Anatolievich Pavlov, Elena Borisovna Misura, Oleg Valentinovich Melnikov, Iryna Pavlovna Mukha, <b>NP-hard Scheduling Problems in Planning Process Automation in Discrete Systems of Certain Classes</b>	
11:50-12:05	Ivan Dychka, Ihor Tereikovskiy, Liudmyla Tereikovska, Volodymyr Pogorelov, Shynar Mussiraliyeva, <b>Deobfuscation of Computer Virus Malware Code with Value State Dependence Graph</b>	
12:05-12:20	Rozhdov O.I., Yuriychuk I.M., Deibuk V.G., <b>Building a Generalized Peres Gate with Multiple Control Signals</b>	
12:20-12:35	Dmitriy Zelentsov, Olga Denysiuk, <b>Neural Network Algorithm for Accuracy Control in Modelling of Structures with Changing Characteristics</b>	

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12:35-12:50	Yevgeniy Bodyanskiy, Oleksii Didyk, <b>On-line Robust Fuzzy Clustering for Anomalies Detection</b>
12:50-14:00	<b>Launch Buffet</b>
14:00-14:15	V.O. Bohaienko, V.M. Popov, <b>Optimization of Operation Regimes of Irrigation Canals using Genetic Algorithms</b>
14:15-14:30	Volodymyr Shelyagin, Ievgen Zaitsev, Artemii Bernatskyi, Vladyslav Khaskin, Ivan Shuba, Volodymyr Sydorets, Oleksandr Siora, <b>Monitoring of Laser Welding Process using its Acoustic Emission Signal</b>
14:30-14:45	Sergiy Mykulyak, Vasyl Kulich, Sergii Skurativskyi, <b>Simulation of Shear Motion of Angular Grains Massif via the Discrete Element Method</b>
14:45-15:00	Andrii Petrashenko, Denis Zamiatin, Oleksii Donchak, <b>Model of Reconfigured Sensor Network for the Determination of Moving Objects Location</b>
15:00-15:15	Andrii Bomba, Nataliia Kunanets, Mariia Nazaruk, Volodymyr Pasichnyk, Natali-ia Veretennikova, <b>Information Technologies of Modeling Processes for Preparation of Professionals in Smart Cities</b>
15:15-15:30	Pavlo Kovalchuk, Hanna Balykhina, Roman Kovalenko, Olena Demchuk, Viacheslav Rozhon, <b>Information Technology of the System Control of Water Use within River Basins</b>
15:30-15:45	Dmytro Kinoshenko, Sergii Mashtalir, Vladyslav Shlyakhov, Mykhailo Stolbovyi, <b>Video Shots Retrieval with use of Pivot Points</b>
15:45-16:00	Olena Vynokurova, Dmytro Peleshko, Semen Oskerko, Vitalii Lutsan, Marta Peleshko, <b>Multidimensional Wavelet Neuron for Pattern Recognition Tasks in the Internet of Things Applications</b>
16:00-16:20	<b>Coffee Break</b>
16:20-16:35	Ievgen Ivanov, Taras Panchenko, Mykola Nikitchenko, Fabunmi Sunmade, <b>On Formalization of Semantics of Real-time and Cyber-Physical Systems</b>
16:35-16:50	Zhengbing Hu, Igor Tereykovskiy, Yury Zorin, Lyudmila Tereykovska, Alibiyeva Zhibek, <b>ICCSEEA2018-41- Optimization of Convolutional Neural Network Structure for Biometric Authentication by Face</b>

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## Geometry

- 16:50-17:05 Stanislav S. Zub, N.I. Lyashko, S.I. Lyashko, Andrii Yu. Cherniavskiy, **Levitating Orbitron: Grid Computing**
- 17:05-17:20 Polina Zhernova, Anastasiya Deyneko, Zhanna Deyneko, Irina Pliss, Volodymyr Ahafonov, **Data Stream Clustering in Conditions of an Unknown Amount of Classes**
- 17:20-17:35 Volodymyr Kovalchuk, Olena Demchuk, Dmytro Demchuk, Oleksandr Voitovich, **Data Mining for a Model of Irrigation Control using Weather Web-services**
- 17:35-17:50 Serhiy V. Balovsyak, Oleksandr V. Derevyanchuk, Igor M. Fodchuk, **Method of Calculation of Averaged Digital Image Profiles by Envelopes as the Conic Sections**
- 18:00-20:00 **Welcome Banquet**
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## Oral Session

Friday, January 19, 2018

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Time	Activity	Location
9:00-9:30	<b>Keynote Speech: New Symmetries and Fractal-Like Structures in the Genetic Coding System</b> <b>Speaker:</b> Prof. Sergey Petoukhov	
9:30-10:00	<b>Keynote Speech: RNA Quasi-Orthogonal Block Code</b> <b>Speaker:</b> Prof. Moon Ho Lee	<a href="#"><u>Conference Place</u></a>
10:00-10:15	Viktor Putrenko, Nataliia Pashynska, <b>Risk Modeling of Accidents in the Power System of Ukraine with Using Bayesian Network</b>	<a href="#"><u>“Slavianskyiv Hall”, Hotel LYBID</u></a>
10:15-10:30	Yu.Gordienko, Peng Gang, Jiang Hui, Wei Zeng, Yu.Kochura, O.Alienin, O. Rokovyi, S. Stirenko, <b>Deep Learning with Lung Segmentation and Bone Shadow Exclusion Techniques for Chest X-Ray Analysis of Lung Cancer</b>	
10:30-10:45	Serhiy V. Balovsyak, Khrystyna S. Odaiska, <b>Hardware and Software Complex for Automatic Level Estimation and Removal of Gaussian Noise in Images</b>	

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10:45-11:00	Klyatchenko Y., Tarasenko G., Tarasenko-Klyatchenko O., Tarasenko V., Teslenko O., <b>Optimization of Processor Devices Based On the Maximum Indicators of Self-correction</b>
11:00-11:20	<b>Coffee Break</b>
11:20-11:35	Stetsenko Inna V., Dyfuchyna Oleksandra, <b>Simulation of Multithreaded Algorithms Using Petri-Object Models</b>
11:35-11:50	Yury Zorin, <b>A Comprehensive Analysis of the Bat Algorithm</b>
11:50-12:05	Anatolii Pashko, Violeta Tretynyk, <b>Methods of the Statistical Simulation of the Self-Similar Traffic</b>
12:05-12:20	Vasyl Lenko, Volodymyr Pasichnyk, Natalia Kunanets, Yuriy Shcherbyna, <b>Knowledge Representation and Formal Reasoning in Ontologies with Coq</b>
12:20-12:35	Sergii Babichev, Volodymyr Lytvynenko, Aleksandr Gozhyj, Maksym Korobchynskyi, Mariia Voronenko, <b>A Fuzzy Model for Gene Expression Profiles Reducing Based on the Complex Use of Statistical Criteria and Shannon Entropy</b>
12:35-12:50	Roman Tkachenko, Ivan Izonin, <b>Model and Principles for the Implementation of Neural-Like Structures based on Geometric Data Transformations</b>
12:50-14:00	<b>Launch Buffet</b>
14:00-14:15	Tkachenko R. O., Doroshenko A. V., Izonin I. V., Tsymbal Y.V., Havrysh B. M., <b>Imbalance Data Classification via Neural-like Structures of Geometric Transformations Model: Local and Global Approaches</b>
14:15-14:30	D. Humennyi, I. Parkhomey, M. Tkach, <b>Structural Model of Robot-manipulator for the Capture of Non-cooperative Client Spacecraft</b>
14:30-14:45	Volokyta Artem, Shymkovych Volodymyr, Volokyta Ivan, Vasyliiev Vladyslav, <b>Research and Development of a Stereo Encoder of a Fm-Transmitter based on FPGA</b>
14:45-15:00	N. Kulishova, N.Suchkova, <b>Impact of the Textbooks' Graphic</b>

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**Design on the Augmented Reality Applications Tracking Ability**

- 15:00-15:15     Vasyl Kut, Nataliia Kunanets, Volodymyr Pasichnik, Valentyn Tomashevskyi, **The Procedures for the Selection of Knowledge Representation Methods in the “Virtual University” Distance Learning System**
- 15:15-15:30     Lidiia Tereshchenko, Vitalii Khomicky, Ludmyla Abramova, Ihor Kudybyn, Ivan Nikitin, Igor Tereshchenko, **Physical and Mathematical Modeling of Permeable Breakwaters**
- 15:30-15:45     V.Maksymovych, E. Nyemkova, M. Shevchuk, **Statistic Properties and Cryptographic Resistance of Pseudorandom Bit Sequence Generators**
- 15:45-16:00     Dan Tavrov, Liudmyla Kovalchuk-Khymiuk, Olena Temnikova, Nazar-Mykola Kaminskyi, **Perceptual Computer for Grading Mathematics Tests within Bilingual Education Program-134**
- 16:00-16:20     **Coffee Break**
- 16:20-16:35     Oleksandr Rolik, Sergii Telenyk, Eduard Zharikov, **Management of Services of a Hyperconverged Infrastructure using the Coordinator**
- 16:35-16:50     Tetiana Shestakevych, Volodymyr Pasichnyk, Nataliia Kunanets, **Information and Technology Support of Inclusive Education in Ukraine**
- 16:50-17:05     Matthew He, Z. B. Hu, Sergey Petoukhov, **Triply Stochastic Cubes Associated with Genetic Code Numerical Mappings**
- 18:00-20:00     **Banquet**
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## Poster Session

Friday, January 19, 2018

Time	Activity	Location
Full day, Friday, January 19, 2018	V.A. Voskoboinick, V.N. Turick, O.A. Voskoboinyk, A.V. Voskoboinick, I.A. Tereshchenko, <b>Influence of the Deep Spherical Dimple on the Pressure Field under the Turbulent Boundary Layer</b>	<a href="#"><u>Conference Place “Slavianskyiy Hall”, Hotel LYBID</u></a>
	Volodymyr Maksymovych, Oleh Harasymchuk, Ivan Opirskyy, <b>The Designing and Research of Generators of Poisson Pulse Sequences on Base of Fibonacci Modified Additive Generator</b>	
	Oleksandr Lemeshko, Tetiana Lebedenko, Oleksandra Yeremenko, Oleksandr Simonenko, <b>Mathematical Model of Queue Management with Flows Aggregation and Bandwidth Allocation</b>	
	Alexei Romankevich, Andrii Feseniuk, Ivan Maidaniuk, Vitaliy Romankevich, <b>Fault-tolerant Multiprocessor Systems Reliability Estimation using Statistical Experiments with GL-models</b>	
	A. Tymoshenko, D. Klyushin, S. Lyashko, <b>Optimal Control of Point Sources in Richards-klute Equation</b>	
	Oleksandra Yeremenko, Oleksandr Lemeshko, <b>QoS Ensuring over Probability of Timely Delivery in Multipath Routing</b>	
	XIE Baiming, ZHANG Chi, GONG Qing-wu, Koji Koyamada, ZENG Hua-rong, ZHAO Li-jin, QIAO Hui, HUANG Liang, <b>Icing Thickness Prediction of Overhead Power Transmission Lines using Parallel Coordinates and Convolutional Neural Networks</b>	
	LIU Jun, ZHAO Lijin, HUANG Liang, ZENG Huarong, ZHANG Xun, PENG Hui, <b>Prediction of Dissolved Gas Concentration in Oil Based on Fuzzy Time Series</b>	
	A.V. Akhmametiyeva, <b>Complex Steganalytic Method for Digital Videos</b>	
	V. Barannik, O. Yudin, Y. Boiko, R. Ziubina, N. Vyshnevskaya, <b>Video Data Compression Methods in the Decision Support Systems</b>	

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Zhengbing Hu, Sergiy Gnatyuk, Maria Kovtun, Nurgul Seilova,  
**Method of Searching Birationally Equivalent Edwards Curves  
over Binary Fields**

V. Tolubko, S. Kozelkov, S. Zybin, V. Kozlovskiy, Y. Boiko,  
**Criteria for Evaluating the Effectiveness of the Decision  
Support System**

Artem Sokolov, Oleg Zhdanov, **Prospects for the Application of  
Many-valued Logic Functions in Cryptography**

Artem Chyrkov, Pylyp Prystavka, **Suspicious Object Search in  
Airborne Camera Video Stream**

Andrey Kupin, Ivan Muzyka, Dennis Kuznetsov, Yurii Kumchenko,  
**Stochastic Optimization Method in Computer Decision Support  
System**

Vadym Ponomarov, Eugene Lebedev, **Optimal Control of Retrieval  
Queues with Finite Population and State-dependent Service  
Rate**

Kozina M. A, Kozin A.B., Papkovskaya O. B, **Stegoalgorithm  
Resistant to Compression**

Yurii Kulakov, Sergii Kopychko, Victoria Gromova, **Organization  
of Network Data Centers Based on Software-Defined  
Networking**

R. Banakh, A. Piskozub, I. Opirskyy, **Detection of MAC Spoofing  
Attacks in IEEE 802.11 Networks using Signal Strength from  
Attackers' Devices**

Oleksiy Kinzeryavyy, Iryna Kinzeriava, Alexander Olenyuk,  
Krzysztof Sulkowsky, **Steganographic Method of Bitwise  
Information Hiding in Point-defined Curves of Vector Images**

Zhengbing Hu, Oleksii K. Tyshchenko, **Self-Learning Procedures  
for a Kernel Fuzzy Clustering System**

Andrey Kupin, Yurii Kumchenko, Ivan Muzyka, Dennis Kuznetsov,  
**Information Technology of Data Protection on the Basis of  
Combined Access Methods**

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P.H. Wu, G.Q. Hu, D. Wang, **The Study of Visual Self-Adaptive Controlled MeanShift Algorithm**

Yurii Onykiienko, **Method for Research of the Human Static Equilibrium Function**

Serhii O. Soloviov, Mohamad S. Hakim, Hera Nirwati, Abu T. Aman, Yati Soenarto, Qiuwei Pan, Iryna V. Dzyublyk, Tatiana I. Andreeva, **Quality of Symptom-based Diagnosis of Rotavirus Infection Based on Mathematical Modeling**

Igor Tereshchenko, Ivan Zhuk, **Mathematical Modeling of Blood Vessel Stenosis and Their Impact on the Blood Vessel Wall Behavior**

N.Ivanushkina, K.Ivanko, Y.Prokopenko, A.Redaeli, V.Timofeyev, R.Visone, **Simulation of Electrical Restitution in Cardiomyocytes**

V. A. Lakhno, V. V. Tretynyk, **Information Technologies for Maintaining of Management Activity of Universities**

Lakhno V., Zaitsev S., Tkach Y., Petrenko T., **Adaptive expert systems development for cyber attacks recognition in information educational systems on the basis of signs' clustering**

Yashchuk Daria Yu., Golub Bella L., **Research on the use of OLAP Technologies in Management Tasks**

P. Bidyuk, T. Prosyankina-Zharova, O. Terentiev, **Modelling Nonlinear Nonstationary Processes in Macroeconomy and Finances**

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**Saturday, January 20, 2018**

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<b>Time</b>	<b>Activity</b>	<b>Location</b>
10:00-16:00	One-day Tour in Kiev	Kiev

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## Part II Keynote Speeches

**Keynote Speech:** The Landscape and Grand Challenges of Scientific Computing

**Speaker:** Prof. Matthew He

**Time:** 10:00-10:30, January 18, 2018

**Location:** Conference Hall "Slavianskiy", Hotel LYBID



**Abstract.** In recent scientific and technological advances, physical and biological, ecological and environmental, social and behavioral, cognitive sciences, engineering, and other emerging sciences, engineering and information technologies share a common need for efficient algorithms, system software, information systems and architecture, and efficient computing solutions to address large computational and interdisciplinary problems. Many boundaries among science, engineering and social systems are cross-linked in the face of combinations of knowledge and tools as demonstrated in the areas of computational mathematics, scientific computing, network computing, cloud computing, bio-molecular computing, quantum computing, soft computing, most recently perceptual computing. It is the time when the physical, biological and social sciences are joining forces with information computing sciences. It is the time when we will make extraordinary advances in the history of mankind through the field of scientific computing. This talk covers the key elements of computing foundation, current development and landscape of computing, and grand challenges in scientific computing research and its applications.

### Biography

**Matthew He, Ph.D.**, is Full Professor and Assistant Dean of the Halmos College of Natural Sciences and Oceanography of Nova Southeastern University, Florida, USA. He is Full Professor and Grand Ph.D. from the World Information Distributed University since 2004. He has been awarded as an Academician of European Academy of Informatization since 2004. He received the World Academy of Sciences Achievement Awards in recognition of his research contributions in the field of computing in 2003 and 2010. Dr. Matthew He has been selected as one of 65 outstanding overseas Chinese in Chinese stamp book collection as part of nation's 65<sup>th</sup> anniversary celebration in 2014.

Dr. Matthew He has authored/edited 10 books/proceedings and published over 100 research

papers in the areas of mathematics, bioinformatics, computer vision, information theory, mathematics and engineering techniques in medical and biological sciences. He is an editor of International Journal of Software Science and Computational Intelligence, International Journal of Cognitive Informatics and Natural Intelligence, International Journal of Biological Systems, and International Journal of Integrative Biology. He is an invited series editor of Biomedical and Life Sciences of Henry Stewart Talk “Using Bioinformatics in Exploration in Genetic Diversity”. He is a Chairman of International Society of Symmetry in Bioinformatics and a member of International Advisory Board of "International Symmetry Association (ISA). He is also an Editor-in-Chief of International Journal of Information Technology and Computer Science. He is a member of American Mathematical Society (AMS), Association of Computing Machinery (ACM), IEEE Computer Society, World Association of Science Engineering (WASE), and International Advisory Board member of Bioinformatics Group of International Federation for Information Processing (IFIP).

## **Keynote Speech:** Symmetry lectures for students in information science

(Case study for interdisciplinary training)

**Speaker:** Prof. György Darvas

**Time:** 10:30-11:00, January 18, 2018

**Location:** Conference Hall "Slavianskiy",

Hotel LYBID



**Abstract.** I gained experience in information science students' training since I have been reading lectures for more than two decades at the Faculty of Informatics, Eötvös University Budapest (sometimes at other universities abroad). I have chosen a phenomenon (namely *symmetry*) that is present in all scientific disciplines and in almost all branches of the arts. Discussing the appearances of this *phenomenon, class of properties, concept* in all of them, I demonstrate on its example how facilitates such a common phenomenon bridging the concerned disciplines, borrowing ideas, methods, regularities, similitudes, etc. from one field of learning to another. My course demonstrates for the students the advantages of interdisciplinary thinking; teaches them to apply phenomena, properties, concepts in another environment, being it either another discipline, field of creative intellectual activity, or another culture. It helps to shape the students' holistic view of the nature, approaches to understand the world, the ways of thinking and perceiving, creativity and its products, the human culture. Symmetry is an appropriate bridging concept because certain basic forms of symmetry, like *repetition, rotation, similitude* (and also *combined symmetries*) facilitate *algorithmic thinking* that develop the programming abilities of the students. *Algorithmic thinking* appears not only in mathematical programming, but also in many fields of application, including, among others, mechanical and electric engineering, computer software development, in image processing, and of course in such fields like bioinformatics, algebra of the genetic code, applications to acoustic harmony (like music), as well as device development, and so on. Algorithmic approach assists also the interpretation of information processing by the two, antisymmetrically functioning human cerebral hemispheres, and the iteration process of successive information exchange between the two hemispheres. The process may serve as pattern of signal processing in technology as well. Identifying the algorithms in the human perception helps to understand analogies in automation processes and the building of structures in self-organising systems. In short, the symmetry course can be effectively used by the targeted groups of students. The paper will give a short presentation of the subjects, methods and possible pragmatic utilisation of the course.

## **Biography**

**György Darvas** (1948) PhD, took his degrees in theoretical physics (1971) and in philosophy of science (1974) at the Eötvös Loránd University, Budapest. His research concentrates on

symmetries in the sciences, technology and arts, and interdisciplinary bridges between disciplines promoted by the concept and phenomenon of symmetry. He has been working as a senior research fellow for the Hungarian Academy of Sciences (1971-2012). He is the director of the nonprofit institute Symmetrion (1991-), is the founder and CEO (2003-2013) of the International Symmetry Association, and has lectured at the Eötvös L. University (1993-2015), an invited professor at the Tsukuba University, Japan (1996) and the Lomonosov Moscow State University (2006-2008); and invited lecturer at several universities and conferences from the USA through all Europe to Russia and from Japan to Israel. He was founder and editor of the journal *Symmetry: Culture and Science* (1990-), chaired many science-technology-art conferences and festivals, and organised exhibitions on symmetry and related interdisciplinary subjects (1989-). He is an author and editor of over 300 publications, including 14 books.

<http://members.iif.hu/darvasg/Personal/CV-Europass-20151109-DarvasPhd.pdf>

<http://members.iif.hu/darvasg/>

**Keynote Speech:** New Symmetries and Fractal-Like Structures in the Genetic Coding System

**Speaker:** Prof. Sergey V. Petoukhov

**Time:** 9:00-9:30, January 19, 2018

**Location:** Conference Hall "Slavianskiy",  
Hotel LYBID



**Abstract.** The achievements of molecular genetics and bioinformatics lead to significant changes in technological, medical and many other areas of our lives. This article is devoted to new results of study of structural organization of genetic information in living organisms. A new class of symmetries and fractal-like patterns in long DNA-texts is represented in addition to two Chargaff's parity rules, which played an important role in development of genetics and bioinformatics. Our results provide new approaches for modeling genetic informatics from viewpoints of quantum informatics and theory of dynamic chaos.

## Biography

**Sergey V. Petoukhov** is a famous specialist in bioinformatics, biomechanics, theory of symmetries, mathematical and theoretical biology.

Current employments: Head of Laboratory of biomechanical systems research in Mechanical Engineering Research Institute of the Russian Academy of Sciences; Chief researcher of the "Center of interdisciplinary researches of musical creativity" of the Moscow State Conservatory by P.I. Tchaikovsky; Editor-in-Chief of "International Journal of Mathematical Sciences and Computing" (Hong Kong).

Selected honors and awards: Laureate of the State prize of the USSR; Academician of the Academy of Quality Problems (Russia, from 2000); Grand Doctor of Philosophy, Full Professor (The European Academy of Informatization, Belgium, 2004); the Chinese government has included S.V. Petoukhov in the «List of Outstanding Scientists in the World» in 2012; Chairman of Advisory Board of «International Symmetry Association», Budapest, Hungary, from 2003 till now; Honorary chairman of Board Directors of «International Society of Symmetry in Bioinformatics», USA, 2005; co-leader of long-term scientific cooperation between Russian and Hungarian Academies of Sciences in the theme «Non-linear models and symmetrological analysis in biomechanics, bioinformatics and theory of self-organizing systems»; Scientific supervisor and main contractor for competitive state contracts on bioinformatics in 2009-2011; Vice-Chair of the International Advisory Board Directors of the Research Association of Modern Education and Computer Science (Hong Kong) from 2016; scholarship for scientific internship in Germany from the German Academic Exchange Service (DAAD, 2017).

Main research field: bioinformatics, biomechanics, theory of symmetries, matrix analysis,

self-organizing systems, and theoretical biology.

See additional information at <http://petoukhov.com/>.

## **Keynote Speech:** RNA Quasi-orthogonal Block Code

**Speaker:** Prof. Moon Ho Lee

**Time:** 9:30-10:00, January 19, 2018

**Location:** Conference Hall "Slavianskiy",  
Hotel LYBID



**Abstract.** This paper presents a single strand ribonucleic acid (RNA) Kronecker product of double stochastic matrix to a deoxyribose nucleic acid (DNA) double helix based on the block circulant Jacket matrix (BCJM) characteristics which is used to develop a bioinformatics for the molecular communications. The RNA matrix decomposition is the form of the Kronecker product of Hadamard matrices with its pair complementarity. The variants of kernel of the Kronecker families are produced by permutations of the four letters C, A, U, G on positions in the matrix. This decomposition of DNA to RNA leads very clearly to the Kronecker product of the symmetrical genetic matrices. We also analyze DNA quasi-orthogonal matrix.

## **Biography**

**Moon Ho Lee** is a professor and former chair of the Department of Electronics Engineering in Chonbuk National University, Korea. He received the Ph.D. degree from Chonnam National University, Korea in 1984, and from the University of Tokyo, Japan in 1990, both Electrical Engineering. He was in University of Minnesota, U.S.A, from 1985 to 1986 as a post-doctor. He has been working in Namyang MBC broadcasting with chief engineer from 1970 to 1980, after then he joined to Chonbuk National University as a Professor. Dr. Lee has made significant original contributions in the areas of mobile communication code design, channel coding, and multi-dimensional source and channel coding. He has authored 41 books, 160 SCI papers in international journals, and 240 papers in domestic journals, and delivered 350 papers at international conferences. Dr. Lee is a member of the National Academy of Engineering in Korea and a Foreign Fellow of the Bulgaria Academy of Sciences. He is the inventor of Jacket Matrix and it in Wikipedia was cited over 71,151 times, January 6, 2013.

He has specially published Jacket Matrices 3 books as follows:

1. Jacket Matrices-Construction and Its Applications for Fast Cooperative Wireless Signal Processing, LAP LAMBERT Academic publishing, Germany, 2012.
2. Jacket Matrices, Youngil, Korea, 2010.
3. Jacket Matrix and Its Fast Algorithms for Cooperative Wireless Signal Processing, Youngil, Korea, 2010.



## **Part III Instructions for Presentations**

### **Oral Presentation**

#### **Devices Provided by the Conference Organizer:**

Laptops (with MS-Office & Adobe Reader)

Projectors & Screen

Laser Sticks

#### **Materials Provided by the Presenters:**

PowerPoint or PDF files

Durations of each Presentation (Tentatively):

Regular Oral Session: about 15 Minutes of Presentation, 5  
Minutes of Q&A

Keynote Speech: 30 Minutes of Presentation, 10 Minutes of  
Q&A

## Part V Hotel Information

### *Conference Hotel - Premier Hotel Lybid*

Address: 1 Peremohy sq., Kyiv 01135, Ukraine



<https://lybid-hotel.phnr.com/en/contacts>



Premier Hotel Lybid is located in the business and historical center of the capital of Ukraine. The Hotel offers excellent views of Peremohy Square and Shevchenko Boulevard. Ukraina Shopping Mall and National Circus are located near the hotel; aboveground transport junction is convenient. The Botanical Garden and St. Volodymyr's Cathedral are located nearby. The Central Railway Station and Voksalna metro station is a ten minute walk. Comfortable and affordable Kiev hotel offers 274 light and comfortable rooms of different categories.



## **Part VI Contact Us**

### **Contact Information**

**Dr. Z.B. Hu**

The Secretary of ICCSEEA2018

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