

CONFERENCE ABSTRACT

**2019 2nd International Conference on Mathematics and
Statistics (ICoMS 2019)**

July 8-10, 2019

Prague, Czech Republic



Sponsored by



Supported by



الجامعة الألمانية الأردنية
German Jordanian University

Published and Indexed by



<http://www.icoms.org/>

Table of Contents

ICoMS 2019 Conference Introduction	4
Presentation Instruction	5
Honored Speaker Introduction	6
Detailed Schedule of Conference	13
Session 1: Computational Mathematics and Applied Mathematics	
P0007: Robust G-Optimal Designs Against Model Misspecification in the Presence of Block Effects	15
<i>Peang-or Yeesa, Patchanok Srisuradetchai and John J. Borkowski</i>	
P1001: Multidimensional Catalytic Branching Random Walk with Regularly Varying Tails	16
<i>Ekaterina Vl. Bulinskaya</i>	
P0022: Mathematical Modeling and Simulation of 3-Qubits Quantum Annealing Processor	16
<i>Saud Owyed, A. Abdel-Aty, Mohamed Mabrok and Nordin Zakaria</i>	
P0026: Using Fuzzy Bits and Neural Nets to Partially Invert Few Rounds of Some Cryptographic Hash Functions	16
<i>Sergij V. Goncharov</i>	
P2003: ESProNet: A Model Library for the Dynamic Simulation of Industrial Symbiosis	17
<i>Martin Maiwald, Linda Kosmol, Christoph Pieper and Thorsten Schmidt</i>	
P2004: Phase Field Modelling of the Chemo-Mechanical Responses of Solid Solutions Far from Equilibrium	18
<i>Santiago Pe ña Clavijo, Luis FR Espath and Victor M. Calo</i>	
P2006: Numerical Effects in Computer Simulation of Simplified Hodgkin-Huxley Model	18
<i>Valerii Y. Ostrovskii, Timur I. Karimov, Ekaterina P. Solomevich, Georgii Y. Kolev and Denis N. Butusov</i>	
P2013: Packing of R^3 by Crosses	18
<i>Catarina M. N. Cruz and Ana M. D'Azevedo Breda</i>	
Session 2: Statistical Science	
P0003: Comparing the First and the Second Orders of Random Coefficient Autoregressive Model on Time Series Data	20
<i>Autcha Araveporn and Somsri Banditvilai</i>	
P0018: Adaptive Estimation of Autoregressive Models Under Long-Tailed Symmetric Distribution	20
<i>Beg üm Yent ü r, Özlem Türker Bayrak and Ayşen Dener Akkaya</i>	
P0009: Factors Affecting Efficiency of Police Stations in Metropolitan Police Division 3	21
<i>Pornpimol Chaiwuttisak</i>	

P0019: Generalized Linear Model Approach for Medical Data	22
<i>Neriman Akdam and Neslihan Iyit</i>	
P0023: Forecasting Models of Chinese, Malaysian and South Korean Tourists Visiting Thailand	22
<i>Somsri Banditvilai and Siriluck Anansatitzin</i>	
P0015: Estimation and Use of Correlation in Multiple Hypothesis Testing with High Dimensional Data	23
<i>Pianpool Kirdwichai</i>	
P0020: Exponential Power-Chen Distribution and Its Some Properties	23
<i>Noorsl Ahmed Zeenalabiden and Buğra Saraçoğlu</i>	
P0004: Comparing Penalized Regression Analysis of Logistic Regression Model with Multicollinearity	24
<i>Autcha Araveeporn and Choojai Kuharatanachai</i>	
Poster Session	
P1004: Fatality Involving Road Accidents in Malaysia: A Comparison between Three Statistical Models	25
<i>Alvin Ho Chun Wai, Sam Yi Seng and Jeff Lai Wan Fei</i>	
P2007: Development of University Scientific Knowledge Ontological Model	25
<i>Gulnaz Zhomartkyzy, Saule Kumargazhanova, Galina Popova and Laura Suleimenova</i>	
P1005: Valuation of Real Estate: A Multiple Regression Approach	26
<i>Wong Mei Chin, Nicholas Lee Wen Kit and Jeff Lai Wan Fei</i>	
P2008: Bayes Reliability Analysis of Parameters of Generalized Pareto Distribution Under Different Loss Functions	26
<i>Song Ying and Cao Yuanping</i>	
P1006: Behaviour of Malaysia and Vietnam Exchange Rate in Response to Changes in Inflation Rate	26
<i>Khoo Jie Yuin, Yong Poh Yee and Ganeshsree Selvachandran</i>	
P2014: Developing a Model for Managing the Curriculum Model Competency Form	27
<i>Indira Uvaliyeva, Saule Kumargazhanova and Gulnaz Zhomartkyzy</i>	
P1009: Behaviour of Malaysia and Australia Exchange Rate in Response to the Prices of Commodities	27
<i>Wearn Qian Soon, Leng Poh Hong and Ganeshsree Selvachandran</i>	
P1010: Effects of High Frequency Trading on the Malaysian Stock Market	28
<i>Faith Kabanda, Ali Alaali and Yap Hong Keat</i>	
Conference Venue	29
Academic Visit & Tour	30
Note	32
Feedback Information	35

Introduction

Welcome to 2019 2nd International Conference on Mathematics and Statistics (ICoMS 2019), which is organized by Hong Kong Chemical, Biological & Environmental Engineering Society (CBEES) and Biology and Bioinformatics (BBS), and is supported by German Jordanian University, Jordan. The objective of 2019 2nd International Conference on Mathematics and Statistics (ICoMS 2019) is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Mathematics and Statistics.

Papers will be published in the following proceeding or journal:



ACM Conference Proceedings (ISBN: 978-1-4503-7168-1): archived in ACM Digital Library, indexed by EI Compendex and SCOPUS, and submitted to be reviewed by Thomson Reuters Conference Proceedings Citation Index (ISI Web of Science).



International Journal of Applied Physics and Mathematics (IJAPM) (ISSN: 2010-362X), which will be indexed by EI (INSPEC, IET), Index Copernicus, CAS ect.

Conference website and email: <http://www.icoms.org/>; icoms@cbees.net

Presentation Instruction

Instruction for Oral Presentation

Devices Provided by the Conference Organizer:

Laptop Computer (MS Windows Operating System with MS PowerPoint and Adobe Acrobat Reader)

Digital Projectors and Screen

Laser Stick

Materials Provided by the Presenters:

PowerPoint or PDF Files (Files should be copied to the Conference laptop at the beginning of each Session.)

Duration of each Presentation (Tentatively):

Keynote Speech: about **45** Minutes of Presentation and **5** Minutes of Question and Answer

Invited Speech: about **15** Minutes of Presentation and **5** Minutes of Question and Answer

Oral Presentation: about **12** Minutes of Presentation and **3** Minutes of Question and Answer

Instruction for Poster Presentation

Materials Provided by the Conference Organizer:

The place to put poster

Materials Provided by the Presenters:

Home-Made Posters: Submit the poster to the staff when signing in

Poster Size: A1 (841*594mm)

Load Capacity: Holds up to 0.5 kg

Best Presentation Award

One Best Oral Presentation and one Best Poster Presentation will be selected from each session, and the Certificate for Best Presentation will be awarded at the end of each session on July 9, 2019.

Dress Code

Please wear formal clothes or national representative of clothing.

Honored Speaker Introduction

Keynote Speaker I



Prof. João Tiago Praça Nunes Mexia
Universidade Nova de Lisboa, Portugal

Prof. João Tiago Praça Nunes Mexia was born in Lisbon in June of 1939. The most part of his career was as Full Professor at the FCT/UNL-Faculty for Sciences and Technology of the New University of Lisbon. At that time he supervised the teaching of Statistics at FCT/UNL and directed the Research Center in Mathematics of the University (CMA-Center for Mathematics and its Applications) from 1999 to 2009. In 2009 he became Emeritus Professor. Until now he supervised 19 Ph.D. and co-supervised 12 Ph.D. His research is centered on Linear Statistical Inference, having almost 100 papers published in International Journals.

Topic: "Confidence Ellipsoids for Additive Pearsonian Models"

Abstract—We use a classical result on Cumulant Generation Function to obtain Least Squares Estimators for the components, assumed to be independent and identically distributed of the vectors $\mathbf{Z}_1, \dots, \mathbf{Z}_m$ of an additive model

$$\mathbf{Y} = \mathbf{X}_0 \boldsymbol{\beta}_0 + \sum_{i=1}^m \mathbf{X}_i \mathbf{Z}_i + \mathbf{e}$$

where $\boldsymbol{\beta}_0$ is fixed and the $\mathbf{Z}_1, \dots, \mathbf{Z}_m$ and \mathbf{e} are assumed to be independent and \mathbf{e} will be normal homoscedastic.

We then obtain the cumulants of order 2, 3 and 4 of the $\mathbf{U}_h = \boldsymbol{\alpha}^T (\mathbf{Y} - \boldsymbol{\mu})$, $h=1, \dots, n$, with $\boldsymbol{\mu} = \mathbf{X}_0 \boldsymbol{\beta}_0$ and the $\boldsymbol{\alpha}_1, \dots, \boldsymbol{\alpha}_n$ constituting an orthonormal basis for \mathbb{R}^n :

Applying the Edgeworth Expansions we obtain (approximate) quantiles $u_{p,l}$

for the U_h , $h=1,\dots,n$. We will adjust confidence ellipsoids to these quantiles reducing the quadratic form to an inner product. Thus

$$\mathbf{v}^T \mathbf{M} \mathbf{v} = \mathbf{v}^{<2>T} \mathbf{s}(\mathbf{M}),$$

where, with $\mathbf{v} = (v_1, \dots, v_w)$ and $\mathbf{M} = [m_{l,h}]$ we have $\mathbf{v}^{<2>} = (v_1^2, \dots, 2v_1 v_w, \dots, v_w^2)$ and $\mathbf{s}(\mathbf{M}) = (m_{1,1}, \dots, m_{1,w}, \dots, m_{w,w})$.

Using the geometrical argument, see Scheffé(1959), we will obtain joint confidence intervals for the $\boldsymbol{\alpha}^T \boldsymbol{\mu}$.

Keynote Speaker II



Prof. Carlos A. Braumann
University of Évora, Portugal

Carlos A. Braumann is Emeritus Professor and member of Departamento de Matemática, Escola de Ciências e Tecnologia, Universidade de Évora; Centeo de Investiga ção em Matemática e Aplica ções da Universidade de Évora, Instituto de Investiga ção e Forma çao Avan çada, Universidade de Évora where he has been Vice-Rector in 1987-94 and Rector in 2010-14. His publications are mostly on Stochastic Differential Equations and its applications in several areas (population dynamics, fisheries, animal growth, demography, finance). He got his Ph.D. in 1979 at the Stony Brook University and his habilitation in Stochastic Processes at the UE in 1988. He is an elected member of the International Statistical Institute since 1992, a former President of the European Society for Mathematical and Theoretical Biology (2009-12) and of the Portuguese Statistical Society (2006-09 and 2009-12), and a former member of the European Regional Committee of the Bernoulli Society (2008-12).

Topic: "Individual Growth Modelling with Stochastic Differential Equations"

Authors: **Carlos A. Braumann**, Patr ícia A. Filipe and Gon çalo Jacinto

Abstract—Common growth curves for the weight $X(t)$ of an animal at age t can be described by a differential equation of the form $dY(t)=\beta(\alpha-Y(t))dt$, where $Y(t)=h(X(t))$ and h is an appropriate strictly increasing continuously differentiable function, $\alpha=h(A)$ (A = maturity weight of the animal), and $\beta>0$ is a rate of approach to maturity. Adjustment to data was usually done through non-linear regression inappropriate methodology that ignores the growth dynamics and the influence of environmental fluctuations on it. Instead, we use instead stochastic differential equations (SDEs) models $dY(t)=\beta(\alpha-Y(t))dt+\sigma dW(t)$, where $W(t)$ is a standard Wiener process and σ is an intensity parameter of the fluctuations. We have previously studied estimation, prediction and optimization issues using cattle weight data from females of Mertolengo cattle breed. In the present work, we have adjusted and applied the methodologies to the weight data of males of Mertolengo cattle breed and Alentejana cattle breed. Since model parameters may vary from animal to animal and that variability can be partially explained by their genetic differences, we introduce the extension of the study to SDE mixed models. These mixed models incorporate the individual genetic values that are available at the databases of the producer associations.

Acknowledgements: The authors belong to the research centre Centro de Investigação em Matemática e Aplicações (CIMA), Universidade de Évora, supported by FCT (Fundação para a Ciência e a Tecnologia, Portugal, project UID/MAT/04674/2019).

Invited Speaker I



Prof. Alexander Bulinski
Moscow State University, Russia

Alexander Bulinski, Professor of the Moscow State University, Dr. Sc. Phys. Math. (Habilitation) is a Member of the Board of the Moscow Mathematical Society since 2000, was a Member of the European Committee of the Bernoulli Society (2002-2006). He is an author of 5 books and numerous research papers. His main results pertain to the theory of stochastic processes and random fields. Various statistical applications of limit theorems are also in the scope of his activity. A.Bulinski belongs to the scientific school of Professor A.N.Kolmogorov being his former PhD student. He was awarded the State Scholarship for prominent scientists and International Science Foundation Diploma "for outstanding contribution to world science and education". He is a winner of the Lomonosov prize in Science. A.Bulinski is a Member of the Editorial Boards of 6 journals. He was Invited Professor in France, Germany, Sweden, Netherlands, UK etc. Under his scientific direction 15 PhD-theses were written and 4 are in preparation. He was Keynote Speaker and Invited Speaker, as well as a member of Program Committees, at various International conferences. A.Bulinski is a Member of the Expert Council for Higher Qualification Committee of Russia, Head of the Federal Teaching Union on Mathematics and Mechanics in the Higher Education System of Russia.

Topic: "Statistical Estimation of Mutual Information and Applications"

Abstract—Statistical estimation of mutual information is important for various applications. Such estimates are employed, for instance, in machine learning, feature selection and identification of textures inhomogeneities. In this regard one can refer, e.g., to the book by V.Bolon-Canedo and A.Alonso-Betanzos (2018), see also a review by J.R.Vergara and P.A.Estevez (2014). We develop the quite recent papers by A.Bulinski, A.Dimitrov (2018) and A.Bulinski, A.Kozhevin (2018), concerning the Shannon entropy, to study statistical estimation of mutual information and the Kullback-Leibler divergence. We investigate the asymptotic properties of proposed estimates constructed by means of i.i.d. (vector-valued) observations. For this purpose we apply the techniques involving the nearest neighbor statistics. Special attention is paid to results of computer simulations in the framework of mixed models (see, e.g. F.Coelho, A.P.Braga, M.Verleysen (2016), W.Gao, S.Kannan, P.Viswanath (2018)) comprising the widely used logistic regression. In contrast to previous

works we do not suppose that the set of a response variable values is endowed with nontrivial metric. This is essential in many cases for analysis of medical and biological data.

Invited Speaker II



Prof. Xingbo Wang
Foshan University, China

Dr. & Prof. Xingbo Wang got his Master and Doctor's degrees at National University of Defense Technology (NUDT) of China. Since 1994, he had worked at NUDT on CAD/CAM/CNC technologies till 2010. Since 2010, he has been a professor in Foshan University with research interests in intelligent manufacturing system and computer applications. Prof. Wang is now in charge of Guangdong Engineering Center of Information Security for Intelligent Manufacturing System, where a lot of cryptography problems have to be dealt with the elementary number theory. He then set up a new method to study odd integers by means of perfect full binary tree and derived out many new properties of the odd integers, including genetic property that makes it easier to factorize an odd integer. Now Prof. Wang is devoting himself to developing a fast algorithm to integer factorization and intending to solve the hard problem of integer factorization.

Topic: "Deterministic-embedded Monte Carlo Approach to Find out an Objective Item in a Large Number of Data Sets"

Abstract—The paper investigates an approach to find out an objective integer in a large integer interval. It first puts forward an approach to subdivide a large integer interval into small ones that are available for the Monte Carlo randomized search algorithm, then selects a small interval by the Monte Carlo algorithm and applies a deterministic search algorithm on the selected one. In order to make the search in an expected computing time, the paper proposes certain regulations to set an initial length for the small interval and to update it in accordance with the expectation of the time complexity. Mathematical foundations for setting-up the initial value and updating it to an acceptable value are presented and proved in detail and a parallel computing strategy is introduced to realized it. Except for the availability in integer factorization, the approach is also applicable in big data searches.

Detailed Schedule of Conference

Day 1	July 8, 2019 (Monday)	
	Venue: Entrance Hall of Masaryk Dormitory Arrival Registration 10:00-16:00	
Day 2	July 9, 2019 (Tuesday)	
	Morning Conference	
	Venue: Conference Room "Gallery"	
	09:30-09:40	Opening Remarks Prof. Carlos A. Braumann University of Évora, Portugal & Prof. João Tiago Praça Nunes Mexia New University of Lisbon, Portugal
	09:40-10:30	 Keynote Speech I Prof. João Tiago Praça Nunes Mexia New University of Lisbon, Portugal Topic: "Confidence Ellipsoids for Additive Pearsonian Models"
	10:30-11:00	Coffee Break & Group Photo
	11:00-11:50	 Keynote Speech II Prof. Carlos A. Braumann University of Évora, Portugal Topic: "Individual Growth Modelling with Stochastic Differential Equations"
	11:50-12:10	 Invited Speech I Prof. Alexander Bulinski Moscow State University, Russia Topic: "Statistical Estimation of Mutual Information and Applications"
	12:10-12:30	 Invited Speech II Prof. Xingbo Wang Foshan University, China Topic: "Deterministic-embedded Monte Carlo Approach to Find out an Objective Item in a Large Number of Data Sets"
	12:30-14:00 Lunch (Atrium)	
	Afternoon Conference	
	Session 1: 14:00-16:00 Venue: Conference Room "Gallery" Topic: "Computational Mathematics and Applied Mathematics" 8 presentations	

ICoMS 2019 CONFERENCE ABSTRACT

	16:00-16:20 Coffee Break
	Session 2: 16:20-18:20 Venue: Conference Room “Gallery” Topic: “Statistical Science” 8 presentations
	Poster Session: 14:00-18:00 Venue: Conference Room “Gallery”
	18:20-20:00 Dinner (Atrium)
Day 3	July 10, 2019 (Wednesday) 10:00-16:00 Academic Visit & Tour

Tips: Please arrive at the Conference Room 10 minutes before the session begins to upload PPT into the laptop; submit the poster to the staff when signing in.

Session 1

Tips: The schedule for each presentation is for reference only. In order not to miss your presentation, we strongly suggest that you attend the whole session.

Afternoon, July 9, 2019 (Tuesday)

Time: 14:00-16:00

Venue: Conference Room “Gallery”

Topic: “Computational Mathematics and Applied Mathematics”

Session Chair: Prof. Xingbo Wang

<p>P0007 Session 1 Presentation 1 (14:00-14:15)</p>	<p>Robust G-Optimal Designs Against Model Misspecification in the Presence of Block Effects Peang-or Yeesa, Patchanok Srisuradetchai and John J. Borkowski Thammasat University, Thailand</p> <p><i>Abstract</i>—The objective of this paper was to propose a new option for finding robust response surface designs against model misspecification. Because of the uncertainty related to possible reduced models prior to data collection, the researcher should consider using experimental designs that are robust across the set of potential models obtained from the weak heredity (WH) principle. Also, blocking effects were incorporated into all possible models in this study. The geometric mean of G-optimalities was proposed as a weighted G-optimality criterion (G_w) to generate a robust design, while the genetic algorithm (GA) was employed to optimize the weighted G-optimality criterion. Robust designs in the hypercube with 8 to 18 points and 2 and 3 design variables were generated with an appropriate number of blocks. The pattern for weighting the criteria in this study was to give more weight to models with the larger number of parameters. When a true model is the first-order or interaction model, the weighted G-optimal designs in this work have higher G-efficiencies compared to those of G-optimal designs. When a true model is a second-order model, the G-efficiency of a weighted G-optimal design is only slightly less than that of a G-optimal design. In this research, design points found using the GA would be very useful in practice for researchers intending to run an experimental design for data collection.</p>
	<p>Multidimensional Catalytic Branching Random Walk with Regularly Varying Tails Ekaterina Vl. Bulinskaya Novosibirsk State University, Russia</p>

<p>P1001</p> <p>Session 1</p> <p>Presentation 2</p> <p>(14:15-14:30)</p>	<p><i>Abstract</i>—Catalytic branching random walk (CBRW) describes reproduction of particles and their movement in space. The particles may give offspring in the presence of catalysts. Consider CBRW model where the particles perform a random walk over a multidimensional lattice, without procreation outside the catalysts. The latter take a finite number of fixed positions at the lattice. We study the particles spread in case of non-extinction of population initiated by a single particle. The rate of population spread depends essentially on the distribution tails of the random walk jumps. Consider the jumps with independent (or close to independent) components having regularly varying “heavy” tails. The main results show that, after a proper normalization of positions, in the time limit the particles concentrate on a random set, located at the coordinate axes. For a two-dimensional case, the limiting set forms a cross, and, for any higher dimension d, it is a collection of d segments containing the origin. The joint distribution of such segments lengths is found and the time-limit is understood in the sense of weak convergence. This radically differs from the known results for both the CBRW with “light” and semi-exponential distribution tails of the random walk jumps.</p>
<p>P0022</p> <p>Session 1</p> <p>Presentation 3</p> <p>(14:30-14:45)</p>	<p>Mathematical Modeling and Simulation of 3-Qubits Quantum Annealing Processor</p> <p>Saud Owyed, A. Abdel-Aty, Mohamed Mabrok and Nordin Zakaria University of Bisha, Saudi Arabia</p> <p><i>Abstract</i>—In this paper, a new model of 3-qubits quantum annealing processor is designed. The spinchain model is used to simulate the quantum annealing processor. The Hamiltonian which describes the system is introduced and analytically solved using the unitary operator method taking into account, processor in, ground state. The generated entanglement between processor parts is quantified using, concurrence method. The effect of quantum processor parameters on the dynamics of entanglement is investigated. The results show that enough quantum correlation is generated between quantum annealing processor nodes (qubits). However, it has shown that we can control the dynamics of entanglement over the system by controlling the system parameters.</p>
<p>P0026</p> <p>Session 1</p> <p>Presentation 4</p> <p>(14:45-15:00)</p>	<p>Using Fuzzy Bits and Neural Nets to Partially Invert Few Rounds of Some Cryptographic Hash Functions</p> <p>Sergij V. Goncharov Oles Honchar Dnipro National University, Ukraine</p> <p><i>Abstract</i>—We consider fuzzy, or continuous, bits, which take values in $[0;1]$ and $(-1;1]$ instead of $\{0;1\}$, and operations on them (NOT, XOR etc.) and on their sequences (ADD), to obtain the generalization of cryptographic hash functions, CHFs, for the messages consisting of fuzzy bits, so that CHFs become smooth and non-constant functions of each bit of the message. We then train neural nets, NNs, to predict the message</p>

	<p>that has a given hash, where the loss function for the hash of predicted message and given true hash is backpropagatable. We obtain and compare the results of the trainings for standard CHF's with small number of (optionally weakened) rounds. For MD5 and SHA1, SHA2-256 NNs are able to invert 1 round with positive probability, for 2 rounds there are at least 10 misses, then the number of misses exceeds that of matched bits. For more than 5–6 rounds, the full hash of accordingly long messages is almost uninvertible. For SHA3/Keccak the inversion of 1 round for short messages can be exact; of 2 and more is very feeble. Weakened rounds move this barrier further. Learning may delay for few initial epochs. Small group of hash bits can be matched partially.</p>
<p>P2003 Session 1 Presentation 5 (15:00-15:15)</p>	<p>ESProNet: A Model Library for the Dynamic Simulation of Industrial Symbiosis Martin Maiwald, Linda Kosmol, Christoph Pieper and Thorsten Schmidt Technische Universität Dresden, Germany</p> <p><i>Abstract</i>—One approach to a more sustainable industry is the reuse of waste and by-products. In particular, the exchange of resources between companies and the reuse of energy are considered critical, as they are time-dependent and may require technical or organizational changes to the production system leading to new interdependencies between the companies. Simulation is a suitable tool for analyzing the dynamic behavior of production systems to identify and evaluate critical factors and risks with regard to compatibility or feasibility, necessary changes and their effects on the system. This paper presents a modeling and simulation approach for resource reuse and exchange in the context of industrial symbiosis. To distinguish the proposed method from related work, an overview of existing modeling and simulation approaches is presented. The suggested approach is based on the modeling language Modelica. A custom model library with reusable preconfigured model elements is developed to model and simulate different production systems and scenarios bottom-up and modularly and in order to investigate interactions between resource providers and consumers. The conceptual and mathematical development of the model components and their interaction principles are presented and demonstrated. Based on this, organizational interdependencies and their economic and ecological impacts can be analyzed.</p>
	<p>Phase Field Modelling of the Chemo-Mechanical Responses of Solid Solutions Far from Equilibrium Santiago Peña Clavijo, Luis FR Espath and Victor M. Calo Curtin University, Australia</p> <p><i>Abstract</i>—Complex physical and chemical processes rule the evolution of solid solutions as the system moves towards its steady state. When</p>

<p>P2004</p> <p>Session 1</p> <p>Presentation 6</p> <p>(15:15-15:30)</p>	<p>considering a deformable medium, chemical reactions may affect the solid strength and its mechanical properties. Analogously, high mechanical strength may suppress either the volumetric shrinkage or swelling associated with the local volume changes caused by the chemical processes. Moreover, the nucleation and growth of new phases as a result of the chemical reactions may induce heterogeneous stresses. In general, the phase interfaces have a non-zero thickness where the physical and chemical properties vary from one phase to another. Thus, the theoretical and computational modelling of solid solutions enduring chemo-mechanical processes together with interfacial interactions require to capture the stress-assisted volume changes mechanism as the phase interfaces diffuse. In this effort, phase field models emerge as promising tool to simulate interfacial phenomena. These models rely on a diffuse order parameter to monitor the interfaces implicitly. We propose a thermodynamically-consistent phase field framework to describe the dynamics of solid solutions undergoing mass transport and chemical reactions, deformation, and interfacial interactions. Simulation results provide insights into the phenomenon and verify the interleaving between these chemo-mechanical processes.</p>
<p>P2006</p> <p>Session 1</p> <p>Presentation 7</p> <p>(15:30-15:45)</p>	<p>Numerical Effects in Computer Simulation of Simplified Hodgkin-Huxley Model Valerii Y. Ostrovskii, Timur I. Karimov, Ekaterina P. Solomevich, Georgii Y. Kolev and Denis N. Butusov Saint Petersburg Electrotechnical University “LETI”, Russia</p> <p><i>Abstract</i>—In this paper, we consider the impact of the discretization effects on the dynamical behaviour of the single-compartment neuron model represented by simplified Hodgkin-Huxley equations. In order to implement numerical simulation, one need to discretize the continuous model of the system or use the discrete operator preserving the main properties of the continuous prototype. However, discrete models can suffer from negative effects caused by the applied method, discretization step and round-off errors. This fact is particularly important for the analysis of nonlinear systems, e.g. the biological neuron models. Within this study, the impact of the application of the most common one-step integration methods is examined through the series of computational experiments, where the dynamical system is put into the resonant and chaotic oscillation modes. The results of the study are visualized as two-parameter dynamical maps and interspike interval histograms.</p>
<p>P2013</p> <p>Session 1</p> <p>Presentation 8</p>	<p>Packing of \mathbb{R}^3 by Crosses Catarina M. N. Cruz and Ana M. D’Azevedo Breda University of Aveiro, Portugal</p> <p><i>Abstract</i>—The existence of tilings of \mathbb{R}^n by crosses, a cluster of unit</p>

(15:45-16:00)	<p>cubes comprising a central one and $2n$ arms, has been studied by several authors. We have completely solved the problem for \mathbb{R}^2 characterizing the crosses which lattice tile \mathbb{R}^2 as well as determining the maximum packing density for the crosses which do not lattice tile the plane. In this paper we motivate a similar approach to study lattice packings of \mathbb{R}^3 by crosses.</p>
---------------	--



16:00-16:20

Coffee Break

Session 2

Tips: The schedule for each presentation is for reference only. In order not to miss your presentation, we strongly suggest that you attend the whole session.

Afternoon, July 9, 2019 (Tuesday)

Time: 16:20-18:20

Venue: Conference Room “Gallery”

Topic: “Statistical Science”

Session Chair: Prof. Alexander Bulinski

<p>P0003</p> <p>Session 2</p> <p>Presentation 1</p> <p>(16:20-16:35)</p>	<p>Comparing the First and the Second Orders of Random Coefficient Autoregressive Model on Time Series Data Autcha Araveeporn and Somsri Banditvilai King Mongkut’s Institute of Technology Ladkrabang, Thailand</p> <p><i>Abstract</i>—The random coefficient autoregressive (RCA) model develops from the autoregressive model and the hierarchical model. The RCA model has considered a constant parameter and coefficient parameter depended on past data. The least squares method is a widely used method by minimizing the sum of squared residuals and differential with respect to the unknown parameter. In this paper, the concept of the least squares method is used to estimate an unknown parameter of the first and the second orders of Random Coefficient Autoregressive (RCA) model or called RCA(1) and RCA(2) models. The efficiency of the two models is to compare by considering the minimum value of mean square error. The RCA(1) and RCA(2) are then applied to a time series data in the form of nonstationary data. The monthly averages of the Stock Exchange of Thailand (SET) index and the daily volume of exchange rate Baht/Dollar are fitted on these models. The prediction of RCA(1) and RCA(2) models is shown that the RCA(1) model outperforms the RCA(2) model, similar to two data sets.</p>
<p>P0018</p> <p>Session 2</p> <p>Presentation 2</p>	<p>Adaptive Estimation of Autoregressive Models Under Long-Tailed Symmetric Distribution Begüm Yentür, Özlem Türker Bayrak and Ayşen Dener Akkaya Middle East Technical University, Turkey</p> <p><i>Abstract</i>—In this paper, we consider the autoregressive models where the error term is non-normal; specifically belongs to a long-tailed symmetric distribution family since it is more relevant in practice than the normal distribution. It is known that least squares</p>

(16:35-16:50)	(LS) estimators are neither efficient nor robust under non-normality and maximum likelihood (ML) estimators cannot be obtained explicitly and require a numerical solution which might be problematic. In recent years, modified maximum likelihood (MML) estimation is developed to overcome these difficulties. However, this method requires that the shape parameter is known which is not realistic in machine data processing. Therefore, we use adaptive modified maximum likelihood (AMML) technique which combines MML with Huber's estimation procedure so that the shape parameter is also estimated. After derivation of the AMML estimators, their efficiency and robustness properties are discussed through a simulation study and compared with MML and LS estimators.
P0009 Session 2 Presentation 3 (16:50-17:05)	<p>Factors Affecting Efficiency of Police Stations in Metropolitan Police Division 3</p> <p>Pornpimol Chaiwuttisak King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand</p> <p><i>Abstract</i>—The objective of this research is to evaluate the relative performance efficiency and determine the factors affecting the efficiency of 11 police stations in the Metropolitan Police Division 3. The first stage is to analyze the efficiency of the police station by Data Envelopment Analysis (DEA) that measures the variable return to scale (VRS) and considering output-orientation. Input variable is the number of police officers. Output variables are the percentage of arrests with remand in custody, from the total amount of arrests, the percentage of arrests with remand in traffic offences, from the total amount of traffic offences, an average score of people's satisfaction on facilities of the police station, operational processes and the service of the staffs. Secondary data are collected from 11 police stations during January and December 2017, for a total of one year. Primary data, which are the satisfaction score, are obtained from the sample survey. For the second stage, the factors affecting the performance efficiency of the police station are analyzed using multiple regression analysis. The efficient score calculated in the first stage is defined as the dependent variable. The results show that 4 police stations or 36% pure are technically efficient and there is only one police station (or 9%) with scale efficiency. In addition, the population density within the area responsible for the police station has affected the pure technical efficiency of the police station. The number of community resources within the area responsible for the police station has an effect on the scale efficiency of the police station.</p>

<p>P0019</p> <p>Session 2</p> <p>Presentation 4</p> <p>(17:05-17:20)</p>	<p>Generalized Linear Model Approach for Medical Data Neriman AKDAM and Neslihan IYIT Selcuk University, Turkey</p> <p><i>Abstract</i>—Generalized Linear Model (<i>GLM</i>) is a flexible generalization of ordinary linear regression model that the distribution of the response variable needs not to be normal, especially comes from the exponential family including many common discrete and continuous distributions such as normal, binomial, multinomial, negative binomial, Poisson, gamma, inverse gaussian, logistic, and etc.. So <i>GLMs</i> include statistical models such as Poisson regression, and negative binomial regression for count response variable, binary logistic regression and multinomial logistic regression for binary and nominal response variable, respectively and etc..In this study, an application of <i>GLM</i> approach to medical data with dummy coded response variable especially for whether or not there is a disease related to the risk factors will be investigated and inferences will be made based on the <i>GLM</i> for this specific type of response variable.</p>
<p>P0023</p> <p>Session 2</p> <p>Presentation 5</p> <p>(17:20-17:35)</p>	<p>Forecasting Models of Chinese, Malaysian and South Korean Tourists Visiting Thailand Somsri Banditvilai and Siriluck Anansatitzin King Mongkut's Institute of Technology Ladkrabang, Thailand</p> <p><i>Abstract</i>—This research presents a comparative study of two different forecasting methods based on the monthly Chinese, Malaysian, and South Korean tourists visiting Thailand. Holt-Winters method and Box-Jenkins method are compared. The data are taken from the Tourism Authority of Thailand, Ministry of Tourism and Sports starting from January, 2007 to December, 2018. The data are divided into 2 sets. The first set from January, 2007 to December, 2017 is used for constructing and selection the forecasting models. The second set from January, 2018 to December, 2018 is used for computing the accuracy of the forecasting model. The forecasting models are chosen by considering the smallest root mean square error (RMSE). The mean absolute percentage error (MAPE) is used to measure the accuracy of the model. The results show that Additive Holt-Winters method obtains the smallest RMSE for Chinese tourists and Box-Jenkins method gain the smallest RMSE for both Malaysian and South Korean tourists in the modeling process. While MAPE in the forecasting process for China, Malaysia and South Korea tourists are 10.22%, 11.71% and 5.14% respectively.</p>
	<p>Estimation and Use of Correlation in Multiple Hypothesis Testing with High Dimensional Data Pianpool Kirdwichai</p>

<p>P0015</p> <p>Session 2</p> <p>Presentation 6</p> <p>(17:35-17:50)</p>	<p>King Mongkut's University of Technology North Bangkok, Thailand</p> <p><i>Abstract</i>—Within recent years, cheaper, continually improving sequencing and genotyping techniques have resulted in an explosion in high dimensional genomic data. While these information-rich datasets are welcome as potentially useful in areas such as studies of complex diseases and pharmacogenetics, computational difficulties in storage, retrieval and analysis mean that extracting the information relevant to specific research questions is proving to be more difficult than perhaps was originally anticipated. From the statistical modelling perspective, the primary challenge is how to deal with the small number of individuals studied, relative to the number of observed explanatory factors; the so-called “curse of dimensionality”. An example is cancer pharmacogenomics, concerned with identification of genetic variants that influence drug responses. Inference based on multiple hypothesis testing (multiple comparison) procedures was initially preferred in high-dimensional genetic studies. This was mainly because of the comparative simplicity of Bonferroni and related error correction methods, and in spite of well-known limitations of conservativeness and inefficient analyses. Currently, in spite of the substantial availability of analysis methodology, such as p-value aggregation, dimension reduction, variable selection, pooling and Bayesian MCMC methods, the problem of inefficient inference remains unresolved as current methods tend to be either highly computationally demanding or complex to implement and interpret. This talk highlights issues in interpreting information in genomic data and presents both theoretical and simulation results to argue for a novel inferential solution based on nonparametric regression that can reliably identify true positives and simultaneously minimize the number of spurious findings.</p>
<p>P0020</p> <p>Session 2</p> <p>Presentation 7</p> <p>(17:50-18:05)</p>	<p>Exponential Power-chen Distribution and Its Some Properties Noor Al Ahmed Zeen Alabiden and Buğra Saraçoğlu Selçuk University, Turkey</p> <p><i>Abstract</i>—In this study, it has been aimed to introduce a new statistical distribution called Exponential Power - Chen by using the method suggested by Alzaatreh et al. (2013). Some statistical properties such as moments, coefficients of skewness and kurtosis, random number generator for Exponential Power Chen (EP-CH) distribution are obtained. Moreover, the maximum likelihood estimators (MLEs) for unknown parameters of EP-CH distribution have been derived and a Monte Carlo simulation study based on mean square errors and bias of these estimators for various sample sizes have been performed. Finally, an application using real data set</p>

	has been presented for this new distribution.
P0004 Session 2 Presentation 8 (18:05-18:20)	<p>Comparing Penalized Regression Analysis of Logistic Regression Model with Multicollinearity Autcha Araveeporn and Choojai Kuharatanachai King Mongkut's Institute of Technology Ladkrabang, Thailand</p> <p><i>Abstract</i>—The goal of this research is to estimate the parameter of the logistic regression model by penalized regression analysis which consisted of ridge regression, lasso, and elastic net method. The logistic regression is considered between a binary dependent variable and 3 and 5 independent variables. The independent variables are generated from normal distribution, contaminated normal distribution, and t distribution on correlation coefficient at 0.1, 0.5, and 0.99 or called multicollinearity problem. The maximum likelihood estimator has used as the classical method by differential the log likelihood function with respect to the coefficients. Ridge regression is to choose the unknown ridge parameter by cross-validation, so ridge estimator is evaluated by the adding ridge parameter on penalty term. Lasso (least absolute shrinkage and selection operator) is added the penalty term on scales sum of the absolute value of the coefficients. The elastic net can be mixed between ridge regression and lasso on the penalty term. The criterion of these methods is compared by percentage of predicted accuracy value. The results are found that lasso is satisfied when the independent variables are simulated from normal and t distribution in most cases, and the lasso outperforms on the contaminated normal distribution.</p>

Poster Session

July 9, 2019 (Tuesday)

Time: 14:00-18:00

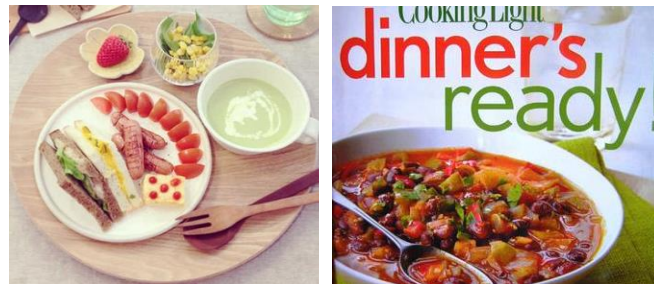
Venue: Conference Room “Gallery”

<p>P1004 Poster 1</p>	<p>Fatality Involving Road Accidents in Malaysia: A Comparison between Three Statistical Models Alvin Ho Chun Wai, Sam Yi Seng and Jeff Lai Wan Fei UCSI University, Malaysia</p> <p><i>Abstract</i>—In recent years, death involving road accidents has become a global raising trend since more people are dependent on automobile transportation. Thus, this work was done to forecast road fatalities for years ahead in Malaysia using three different forecasting models with past data collected as comparison. Comparison between 3 types of forecasting model which were ARIMA(0,1,1), Poisson GLM and Negative Binomial GLM was done and the most suitable model following Malaysia's trend was determined. Road traffic fatality data was taken from Malaysian Institute of Road Safety Research. The data analysis was done by using R programming and EViews. The comparison was done in term of mean squared error, (MSE), root-mean-square error (RMSE), relative forecast error (RFE), mean absolute deviation (MAD) and mean absolute percentage error (MAPE). Results showed that ARIMA model is the best fitted model among Poisson and Negative Binomial models. Hence, the time series ARIMA model has been considered the best models compared to Poisson regression GLM model and Negative Binomial regression GLM model.</p>
<p>P2007 Poster 2</p>	<p>Development of University Scientific Knowledge Ontological Model Gulnaz Zhomartkyzy, Saule Kumargazhanova, Galina Popova and Laura Suleimenova D. Serikbayev East Kazakhstan State Technical University, Kazakhstan</p> <p><i>Abstract</i>—An ontology is a link between objects of knowledge and a connecting bridge between various steps of Knowledge Processes. Ontology development is an important aspect of knowledge management solution support (KM-solutions). In this paper, we consider a university scientific knowledge ontological model which is one of the knowledge management systems tools. The main functions of the university scientific knowledge ontology are given. The main classes, properties and relations of ontology for maintaining the knowledge base of educational resources are described.</p>
	<p>Valuation of Real Estate: A Multiple Regression Approach Wong Mei Chin, Nicholas Lee Wen Kit and Jeff Lai Wan Fei UCSI University, Malaysia</p>

<p>P1005</p> <p>Poster 3</p>	<p><i>Abstract</i>—The real estate sector has been a key factor in development of economy in every country. The valuation of property is also vital for the real estate industry. Thus, this paper presents the best fitting model in conducting the valuation of residential real estate. The main objective of this work was to understand the standard valuation procedures by multiple regression approaches. The type of properties that are used in this study is condominiums that are located within Kuala Lumpur. Multiple regression approach is used in conducting the valuation for these condominiums selected as sample. The data were analyzed using SPSS software based on the dependent variable (asking price) and six independent variable, which were number of bedrooms, number of bathrooms, number of stories, square feet, distance towards rail station and distance towards KLCC. Results of this work showed that multiple regression approach can be utilized to model the value of residential real estate and key findings showed that that all of the independent variables contribute to the model except the distance towards rail station. Our analysis has indicated that the distance towards rail station does not affect the price of condominium in Kuala Lumpur.</p>
<p>P2008</p> <p>Poster 4</p>	<p>Bayes Reliability Analysis of Parameters of Generalized Pareto Distribution Under Different Loss Functions Song Ying and Cao Yuanping Nanchang Hangkong University, China</p> <p><i>Abstract</i>—The generalized Pareto distribution is extensively used in the field of finance, insurance and natural disasters. The statistical inference for its parameter has been a hot spot of researches on its parameters. The aim of this paper is to study the Bayes estimation of the parameter of the generalized Pareto distribution based on the parameter prior, which is Quasi prior distribution. Under three loss functions, squared error loss, LINEX loss and entropy loss function, Bayes estimators are obtained, and the Monte Carlo simulation experiment is used to observe the performance of various Bayes estimators obtained in this paper.</p>
<p>P1006</p> <p>Poster 5</p>	<p>Behaviour of Malaysia and Vietnam Exchange Rate in Response to Changes in Inflation Rate Khoo Jie Yuen, Yong Poh Yee and Ganeshsree Selvachandran UCSI University, Malaysia</p> <p><i>Abstract</i>—A country's inflation rate and exchange rate forms a two-way relationship, whereby the former can affect the latter and vice versa. However, past researches have proven that the exchange rate affects inflation to a lesser extent. Thus, we choose to study the behaviour of exchange rate in response to inflation. While Malaysia has a relatively constant inflation rate for the past 35 years, without exceeding 10 percent, Vietnam's inflation rate is significantly higher with great fluctuations in the same duration. With this large difference in inflation rates, it would be interesting to study the affect onto the movement of</p>

	<p>the VND/MYR exchange rate. Besides observing the relationship, we are predicting the 2015 exchange rate based on historical data. This is done by fitting the data to two prediction models, the Purchasing Power Parity model and the Autoregressive model, and evaluating the most appropriate and accurate model. We found that the best prediction model is the Autoregressive model and proceeded to generate the forecasted exchange rate.</p>
<p>P2014 Poster 6</p>	<p>Developing a Model for Managing the Curriculum Model Competency Form Indira Uvaliyeva, Saule Kumargazhanova and Gulnaz Zhomartkyzy D. Serikbaev East Kazakhstan State Technical University, Kazakhstan</p> <p><i>Abstract</i>—The paper presents a model for managing the structure and content of the curriculum of the main educational programs, taking into account various criteria of optimally, as well as unclearly formalized interests of the main participants and consumers of the educational process. The proposed model allows you to create a curriculum for an educational program using various heuristic methods and optimal criteria. Curriculum development should consist of three stages. At the first stage, all the necessary information is collected. The purpose of the second stage is the distribution of labor intensity by the components of the disciplinary-activity structure of the educational program. The purpose of the third stage is the distribution of disciplines by semesters and years of study based on the method of distribution of labor intensity. The analysis of the optimality of each of the obtained curriculum variants is determined by the values of the weighting factors used in the procedure for calculating the hierarchical criteria of optimality.</p>
<p>P1009 Poster 7</p>	<p>Behaviour of Malaysia and Australia Exchange Rate in Response to the Prices of Commodities Wearn Qian Soon, Leng Poh Hong and Ganeshsree Selvachandran UCSI University, Malaysia</p> <p><i>Abstract</i>—A country's exchange rate and commodity price forms a two-way relationship. However, past researches showed that the exchange rate has weaker effects towards commodity price. Hence, This study focuses on the behaviour of exchange rate in response to commodity price. This work will analyzed the behaviour of Malaysia and Australia in response to commodity price is to forecast future exchange rate. This study will determine if there exists a trend in the historical commodity price and exchange rate of Australia and Malaysia over the period of 2005 to 2015. Other than observing the relationship, the exchange rate for the 2016 was also forecast by using the historical data. Historical data of price of petroleum in Malaysia and price of iron ore in Australia will be used to predict the following year's price Historical data are fitted into two prediction models which are Purchasing Power Parity (PPP) model and Autoregressive models. The most appropriate and accurate model was evaluated. Result showed that autoregressive models was found to be the best prediction model and is used to predict the future exchange rate. Using the autoregressive model, forecasted the exchange rate in 2016 was</p>

	3.417 AUD/MYR.
P1010 Poster 8	<p>Effects of High Frequency Trading on the Malaysian Stock Market Faith Kabanda, Ali Alaali and Yap Hong Keat UCSI University, Malaysia</p> <p><i>Abstract</i>—The high-frequency trading (HFT) has changed the world perspective of how the market behaves .HFT is a good system that provides liquidity to markets whereby it increases the market trend and improves its overall financial growth. On the other hand, some traders believe that this type of trading could lead to the instability of the market. Thus in this work, the effect of high frequency trading on the Malaysian stock market was studied. Historical data of Malaysia index from 2005 to 2011 and 2012 to 2018 was used for analysis and forecasting. In addition, comparison between Autoregressive (AR), Moving Averag (MA) and ARIMA for data set with HFT to the data set without HFT was done. The comparison was done in terms of price, volume and change. The outcome of this work showed HFT in Malaysia had a positive impact on the Malaysian Market to a greater extend.</p>



Dinner	
18:20-20:00	Atrium

Conference Venue

Masaryk Dormitory

<http://www.masarykovakolej.cz/en/>

(Masarykova kolej-ČVUT) : Thákurova 1, 160 41, Praha 6, Prague



The Masaryk Dormitory was founded in 1925, thanks to moral and financial support provided by Tomáš Garrigue Masaryk, the first president of Czechoslovakia. It was built according to the design of Antonín Engel in Sadova Street, nowadays called Thákurova Street, in parallel with the preparations for constructing the adjacent campus of the Czech Technical University in Prague (www.cvut.cz). The Masaryk Dormitory is situated in a strategic location in Dejvice, Prague 6, just 20 minutes away from Prague Vaclav Havel international airport, with excellent public-transport access to the city centre, and with good motorway links. We offer a full range of services: CONGRESS SERVICES - HOTEL FACILITIES - HOSTEL FACILITIES - RESTAURANT SERVICES

How to get there?

Public Transport:

Metro - Trace A station Dejvická

Tram - 20,23,36, night 51 - stations Dejvická or Vítězné náměstí

Bus - 107,116,147,160,206 - station Dejvická Night BUS - routes 502,515 - station Vítězné náměstí

By Car-Please refer to the map at:

<http://www.masarykovakolej.cz/en/going-to-event/navigation>

Academic Visit & Tour

10:00-16:00, July 10, 2019 (Wednesday)

(Tips: Please arrive at the Lobby of Vienna House Diplomat Prague on 9:50 a.m.)

ALL IN ONE TOUR


Free pickup


1 Hour river cruise


4 Hours walk


Lunch


Castle visit


Beer with lunch

Duration: 6 HOURS

Tour starts daily at:

9 am	9 am	10 am	10 am	11 am	11 am
					



40 MAIN SITES AND TOPICS IN ONE DAY!

Prague Castle Town	Lesser Town	Old Town	Jewish Town
1. Loreto Square	11. Neruda Street	21. Old Town Bridge Tower	31. Old Jewish Cemetery
2. Castle Town Square	12. Wallenstein Palace	22. Royal Route	32. Old New Synagogue
3. Strahov Monastery	13. St. Thomas Church	23. Clementinum	33. Jewish Town Hall
4. Schwarzenberg Palace	14. St. Nicholas Church	24. Old Town Square	34. Jewish Ceremonial Hall
5. Archbishop's Palace	15. Infant Jesus of Prague	25. Tyn Church	35. Pinkas Synagogue
6. Prague Castle	16. Knights of Malta	26. Ungelt	36. Maisel Synagogue
7. St. Vitus Cathedral	17. John Lennon's Wall	27. Carolinum	37. Spanish Synagogue
8. St. George Basilica	18. Kampa Island	28. Mozart Theatre	38. Prague Cubism
9. Lobkowitz Palace	19. Certovka Canale	29. Powder Tower	39. Franz Kafka House
10. Rosenberg Palace	20. Charles Bridge	30. Municipal Hall	40. Paris Street

Castle Town



Lesser Town & Charles Bridge



Old Town



New Town



NOTICE:

Castle interior: The visit of the Prague Castle interiors is possible upon request and for additional 300 CZK to see interiors of St. Vitus Cathedral, St. George Basilica, Old Royal Palace, Golden Lane.

Drop off: Additional fee 100 CZK will be charged for transportation back to your hotel. This service needs to be requested to your tour guide as soon as possible immediately at the beginning of the tour.

Most of the tourists coming to Prague have only one day to see the city and therefore we are offering the most comprehensive tour of the whole historical center of Prague possible to do in one day only! It is basically 3 regular Prague tours condensed into a 1 longer tour. But you don't need to worry, you will not be overwhelmed! The tour will give you a great overview of the whole city, its history and culture will not bore you with too much detailed information unless you will ask for it!

Note

[illegible]

Note

[illegible]

Note

[illegible]



Feedback Information

(Please fill this form and return it to conference specialist during the conference days.)

Personal Information					
Conference Name and Paper ID					
Full Name					
E-mail Address					
Area of Research					
Affiliation					
Please indicate your overall satisfaction with this conference with “√”					
	Very Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Very Dissatisfied
Conference Content					
Presentation and Paper Value					
Registration Process					
Venue					
Food and Beverage					
Are You A Member of CBEES	Yes <input type="checkbox"/> No <input type="checkbox"/> (If “No”, you may apply membership from http://www.cbees.org/member.htm)				
Do You Willing to Receive CBEES Future Conferences Information Via E-mail	Yes <input type="checkbox"/> No <input type="checkbox"/>				
Where did you get the conference information?					
Would you please specify the main reason for attending this conference?					
Did the conference fulfill your reason for attending?	Yes– Absolutely <input type="checkbox"/> Yes- But not to my full extent <input type="checkbox"/> No <input type="checkbox"/> (If “No”, please tell us the main reason)				

ICoMS 2019 CONFERENCE ABSTRACT

Would you please list the top 3 to 5 universities in your city?	
Other Field of Interest	
Any Other Suggestions/Comments	

Thank you for taking time to participate in this conference evaluation. Your comments will enable us to execute future conferences better and tailor them to your needs!