

International Federation of Nonlinear Analysts

World Congress 2012
Greece
June 25-July 1

DIVERSITY COOPERATION COLLABORATION

**“Global Health, Environment, Energy, and Economy
Through The Art of Mathematical Sciences”**

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IFNA 2012
GREECE

JUNE 25-JULY 1, 2012 UNIVERSITY OF ATHENS

PROGRAM

IFNA 2012 WORLD CONGRESS

June 24—July 1, 2012

ATHENS, GREECE

THEME OF THE CONGRESS

“GLOBAL HEALTH, ENVIRONMENT, ENERGY AND ECONOMY”
Through the Art of Mathematical Science

The program follows the theme of the congress.

- I. Alphabetical: The keynote speakers

- II. **GLOBAL HEALTH**
Will be held at the **Department of Mathematics, The National and Kapodistrian University of Athens**, June 26-28, 2012.
Olof Palme Ave., Zografou
Athens, info@uoa.gr

- III. **GLOBAL ENVIRONMENT**
Will be held at **The Athens Chamber of Commerce & Industry, (ACCI)**, June 26-27, 2012.
7 Academias St.
Athens 10671; info@acci.gr

- IV. **GLOBAL ENERGY**
Will be held at **The Athens Chamber of Commerce & Industry, (ACCI)**, June 27-28, 2012.
7 Academias St.
Athens 10671; info@acci.gr

- V. **GLOBAL ECONOMY**
Will be held at **The Athens Chamber of Commerce & Industry, (ACCI)**, June 28-29, 2012.

VI. MATHEMATICAL SCIENCE

- Engineering
- Computing
- Environmental Engineering
- Chemistry
- Physics
- Stochastic Systems
- Statistics

Will be held at the **Department of Mathematics, The National and Kapodistrian University of Athens**, June 25-29, 2012.

Olof Palme Ave., Zografou

Athens, info@uoa.gr

ADDITIONAL INFORMATION & REQUESTS

1. Opening ceremonies for participants, guests of participants and friends of IFNA will be held at the historic Zappeion, at the center of Athens, the evening of June 24, 2012 at 7:30 PM, entertainment and reception.
2. Keynote speakers have already been registered. Invited speakers, special sessions invited speakers, other speakers and students MUST register with FREI, S.A. Travel-Congress, <http://www.ifna2012.com/registration.html>, www.ifna2012.gr
3. For international travel to Greece, hotel arrangements and tours, we recommend that you work with FREI, S.A. Travel-Congress.
4. For local travel information from hotels to and from the various locations of the conference will be forthcoming.
5. Complete manuscripts for review and publication will be needed by August 15, 2012.
6. Other pertinent information will be posted for your convenience.

We will keep you posted.
Looking forward to seeing you in Athens.



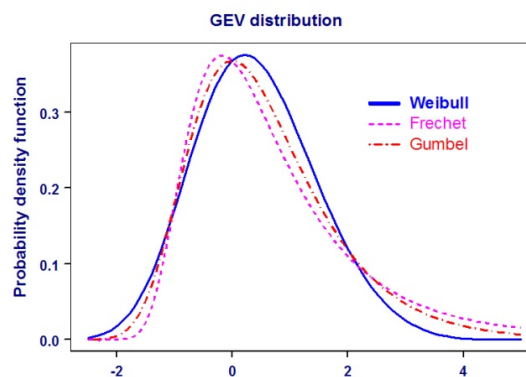
KEYNOTE SPEAKERS



Mohammad Ahsanullah, Ph.D.
 Professor, Rider University,
 New Jersey, USA
 Email: ahsan@rider.edu

Title: Inferences on Generalized Extreme Value Distribution Based on Record Values

Mohammad Ahsanullah is a professor of Statistics at Rider University. He earned his Ph.D. from North Carolina State University. He has taught in various universities in USA and abroad. He has authored and co-authored more than twenty five books and published more than two hundred fifty papers in professional journals. He is Fellow of American Statistical Association and Royal Statistical Society. He is an elected member of International Statistical Institute. He is Editor-in-Chief of Journal of Applied Statistical Science and co-editor of Journal of Statistical Theory and Applications.





Nicholas Askounes Ashford,
Ph.D.
Professor, Massachusetts
Institute of Technology,
Massachusetts, USA
Email: nashford@mit.edu

Title: Transforming the Industrial State: The Next Steps in Addressing the Sustainability Crisis

Nicholas Askounes Ashford is Professor of Technology & Policy at the Massachusetts Institute of Technology, where he teaches courses in *Law, Technology, and Public Policy*; *Sustainability, Trade and Environment* and *Environmental Law, Policy, and Economics*. He holds both a Ph.D. in Chemistry and a Law Degree from the University of Chicago, where he also received graduate education in Economics. Dr. Ashford also teaches intensive courses in Sustainable Development, and European & International Environmental Law at Cambridge University, UK and at the Cyprus University of Technology.





Loucas Christophorou, Ph.D.
Academy of Athens
Email: christlg@otenet.gr

Title: Energy, Environment and Civilization

LOUCAS G. CHRISTOPHOROU obtained his BSc degree in Physics from the University of Athens, Greece, and his PhD and DSc degrees in Physics from the University of Manchester, UK. He was with the Oak Ridge National Laboratory and the University of Tennessee from 1963 to 1995. At Oak Ridge National Laboratory he served as Head of the Atomic and Molecular Radiation Physics Group, The High Voltage Physics Program, The Corporate Fellows Council, and chaired for many years the Laboratory's Distinguished Scientist Program; he was appointed Corporate Fellow in 1981 and Senior Corporate Fellow in 1991. At the University of Tennessee he had been a Ford Foundation Professor of Physics from 1969 to 1997. From 1995 to 2002 he had been with the National Institute of Standards and Technology in Gaithersburg, Maryland.

Christophorou has conducted extensive and broad basic research in atomic and molecular radiation physics, chemical and electron physics, and on materials for radiation detectors, plasma processing and energy. He is the author/editor of 26 books and the author/co-author of about 400 research papers in these areas; he lectured at many universities and research centers in USA, Europe and Japan. He also lectured widely on energy issues and on the impact of scientific and technological advances on society. He is a Fellow of the American Physical Society since 1974, a Fellow of the American Association for the Advancement of Science since 1976, a Permanent Member of the Academy of Athens (Greece) since 2001, and a recipient of the Alexander von Humboldt Senior Scientist Award (Germany, 1991) and the Phoenix Metal (Greece, 1997).





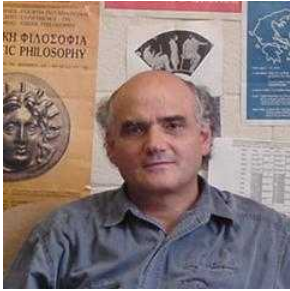
Constantin Corduneanu, Ph.D.
Emeritus Professor,
University of Texas
at Arlington
Email:
cordun@exchange.uta.edu

Title: Interaction between Mathematics and Other Fields of Science

Constantin Corduneanu is an Emeritus Professor at the University of Texas at Arlington, U.S.A. He was born on 26 July 1928 in Iasi, Romania. He graduated at “AI. I. Cuza” University of Iasi (UAIC), Faculty of Mathematics, in 1951 and obtained his PhD in mathematics (1956) at the same university. Besides his usual duties as a professor, he had many other activities, such as participating in various national or international conferences (more than 100), paying short visits and talking about his research work in over 60 universities or institutes on all the continents except Australia and in over 20 countries (including Russia, Ukraine, Germany, England, France, Italy, China, Japan, Hungary, Poland, Portugal and Chile).

During the last 59 years he has published about 200 research papers, including six books in a total of 13 editions (Romanian Academy, Academic Press, Springer, Cambridge University Press, Taylor and Francis, John Wiley & Sons, Allyn & Bacon). His association with UAIC lasted until 1977, a period in which he held positions of assistant, lecturer, associate professor, professor, Dean of Mathematics and Vice-Rector for Research and Graduate Studies, as well as some research positions with the Mathematical Institute of the Romanian Academy in Iasi. He has also served, on different occasions, the Iasi Polytechnic Institute and for three years the newly created institution which is known today as the University of Suceava (where he has also served as Rector over the period 1966-1967). He is the founding Editor of *Libertas Mathematica* and a corresponding Member of the Romanian Academy.





Christos Evangeliou, Ph.D.
Honorary President of LAGP,
Towson University, USA
Email:
cevangeliou@towson.edu

Title: Philosophers and Physicians: The Best Doctor is also a Philosopher

Professor Christos C. Evangeliou is a native of Greece and tenured Professor of Ancient Hellenic Philosophy at Towson University, Maryland, USA, where he has been since 1986. He has also taught as Visiting Professor at Emory University, Appalachian State University, Central Connecticut State University, Villanova University, and lectured at several universities in USA, Canada, Mexico, Spain, Slovakia, Greece, Poland, Russia, Turkey, South Africa, India, and Japan.

He studied the Classics and Philosophy at the University of Athens, Greece, and at Emory University, from where he received his Ph.D. He is the author of numerous papers, published in professional journals and in special volumes; of three volumes of poetry (in Greek); and of four scholarly books: Aristotle's Theory of Categories and Porphyry; When Greece met Africa: The Genesis of Hellenic Philosophy; Themata Politica: Hellenic and Euro-Atlantic; and Hellenic Philosophy: Origin and Character. The first and the last of these books are in their second editions, so is the first of his poetry, Mousa Glykophilousa.

Some of his poems have been translated and published in English, French, German, and even in Chinese for the occasion of the Olympic Games in Beijing in the summer of 2008.

He is or has served on the Editorial Board of Skepsis, Phronimon, Celestia, Penseses y Quehaseres, and Journal of Neoplatonic Studies. He has also served as Vice President of the International Society for Neoplatonic Studies, and is currently American Representative of the Olympic Center of Philosophy and Culture, University of Athens, Greece. In recognition of his services at the OCPC and the IAGP respectively, he has been declared "Honorary President" of the International Association for Greek Philosophy, and an "Honorary Citizen" of Olympia, Greece. Due to his sustained efforts, Towson University is placed in the priority list of the AFGLC (American Foundation for Greek Language and Culture) to receive a grant for the establishment of a Center for Hellenic Studies at the TU.





Nancy L. Geller, Ph.D.
Director of the Office of
Biostatistics Research
NHLBI
Email: gellern@nhlbi.nih.gov

Title: Has the time come to give up blinding in randomized clinical trials?

Nancy L. Geller has been the Director of the Office of Biostatistics Research at the National Heart, Lung and Blood Institute of the National Institutes of Health since 1990. She directs a group of 12 statisticians who collaborate in the design, implementation, monitoring and analysis of multicenter clinical trials in heart, lung and blood diseases and sleep disorders and administers all statistical activities of the National Heart, Lung and Blood Institute. She has published nearly 200 papers in the statistical and medical literature. She is an Associate Editor of Biometrics and a member of the Editorial Board of Clinical Trials. She is a Fellow of both the International Statistics Institute and the American Statistical Association. She was the winner of the 2009 Janet L. Norwood Award for outstanding achievement by a woman in the statistical sciences. She was 2011 President of the American Statistical Association.





Grigoris Kalogeropoulos,
Ph.D.
Professor and Chair of
Mathematics,
University of Athens
Email: gkaloger@math.uoa.gr

Title: PENDING

Dr Kalogeropoulos is Chairman and Professor of Mathematical Analysis in the Department of Mathematics at the University of Athens, Greece.

He obtained his undergraduate degree in Mathematics and his Doctoral Degree in Mathematical Control Theory from City University of London, UK. Dr. Kalogeropoulos is author of more than 160 publications in academic journals and proceedings of conferences. He has written 5 textbooks and 3 technical publications. He served as Doctoral Advisor for 6 students. Recently, he has been elected as the President of the Greek Mathematical Society and he is serving as Editor in Chief in the Bulletin of the Greek Mathematical Society. Finally, he is member of several professional societies.





Stavros Kalogeropoulos, Ph.D.
School of Environment
and technology
University of Brighton, UK
Email:
stevekalogeropoulos@gmail.com

Title: A Bifurcation Point for the Evolving Global Family, the Ternary System of Environment-Energy-Pollution

Dr Stavros Kalogeropoulos holds BSc degrees in Natural Sciences and Geography and in Geology from Athens University, MSc and PhD degrees in Economic Geology from Queen's and Toronto Universities, respectively in Canada. During his thirty years of professional experience he has developed wide expertise in the mineral, energy, industrial, construction and banking sectors both public and private. He currently is Visiting Professor in the School of Environment and Technology of the University of Brighton UK, teaching sustainable development and mineral exploration courses and concomitantly he offers consultancy services in the fields of his expertise. He is the author/co-author of more than sixty five articles, published mainly in foreign scientific journals, with over 110 international citations. He has been awarded by the Association of Exploration Geochemists a prize for the best published paper worldwide (1985), and a prestigious fellowship by the Australian Government. He has participated in many conferences, symposia and scientific and policy-oriented committees and delivered lectures as invited speaker in Canada, Australia and Europe.





Renu Khator, Ph.D.
Chancellor and President,
University of Houston System
Email: rkhatore@uh.edu

Title: Energy Security: A Global Challenge

Renu Khator holds the dual titles of chancellor of the University of Houston System and president of UH. The UH System's first woman chancellor and the first Indian immigrant to head a comprehensive research university in the United States, she assumed her post in January 2008.

As chancellor of the four-university UH System, Khator oversees an organization that serves more than 66,000 students, has a budget that exceeds \$1.3 billion, and has a \$3.5 billion-plus economic impact on the Greater Houston area each year. The UH System includes UH, UH-Clear Lake, UH-Downtown, UH-Victoria plus branch campuses in Pearland and NW Houston and teaching centers in Cinco Ranch and Sugar Land; as well as KUHT, the nation's first educational television station, and two radio stations – KUHF, Houston's National Public Radio affiliate, and the classical music station KUHA.

As UH president, she is the chief executive officer of the largest and oldest of the four UH System universities. UH now enrolls 40,000-plus students, offers more than 300 undergraduate and graduate programs and awards 7,000 degrees each year.

During her tenure, UH has experienced record-breaking research funding, enrollment and private support. In 2011, UH became a Tier One university, with the Carnegie Foundation elevating it into the top category of research universities. The university was also recognized by the Princeton Review for excellence in undergraduate education and by the Chronicle for Higher Education as an exceptional workplace.

Khator earned her bachelor's degree at the University of Kanpur, and received her master's and Ph.D. in political science from Purdue University. A noted scholar in the field of global environmental policy, she is widely published. Prior to her appointment, she was provost and senior vice president at the University of South Florida, capping a 22-year career at that institution.



She was recently appointed to the Indian Prime Minister's Global Advisory Council, and serves on several advisory boards, including the American Council on Education and the Federal Reserve Bank of Dallas. She is a member of the Council on Foreign Relations. Khator's husband, Dr. Suresh Khator, is associate dean of the UH Cullen College of Engineering. The Khators have two daughters, both of whom are ophthalmologists, and a grandson.



Christopher Logothetis, M.D.
Professor, Department of
Genitourinary Medical
Oncology,
Division of Cancer Medicine,
the University of Texas MD
Anderson Cancer Center,
Houston, TX
Email:
clogothe@mdanderson.org

Title: Reconsidering the Approach to Meeting the Prostate Cancer Challenge

Dr. Christopher J. Logothetis has a longstanding interest in genitourinary cancers—germ cell tumors, bladder, renal, and most recently in his career, prostate cancer. His research experience preceded the development of effective chemotherapy and extends to the current era of molecular targeted therapies and classification of cancer. He was among the first to test chemotherapy agents at a time of general skepticism that chemotherapy would be useful in advanced prostate cancer.

Dr. Logothetis has substantial experience both as an investigator in clinical and applied research and as a leader in multidisciplinary research programs. He is Chairman of the Department of Genitourinary Medical Oncology at The University of Texas M. D. Anderson Cancer Center in Houston, Texas. He holds the Roy M. and Phyllis Gough Huffington Distinguished Chair in Clinical Research in Urologic Oncology.

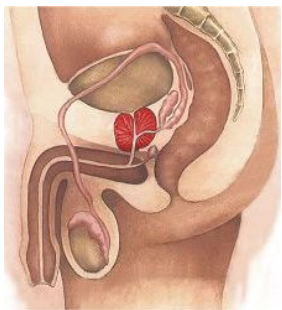
Dr. Logothetis is Director of the Genitourinary Cancer Center and Director of the Prostate Cancer Research Program, which have integrated more than 60 faculty from 7 departments in clinical and basic research studies in prostate cancer. He is the Principal Investigator of the MD Anderson Cancer Center Prostate SPORE (Specialized Programs of Research Excellence), a 5-year, multidisciplinary, collaborative grant funded by the National Cancer Institute. Dr. Logothetis has keen insight into the potential for change and the importance of collaborations among colleagues in academic medicine, community physicians, and patient support and advocacy communities.

On the national level, Dr. Logothetis has been appointed to the Board of Scientific Advisors of the NCI and is a member of the External Advisory Committee for the NCI-sponsored project to characterize the human cancer genome.

Dr. Logothetis is a fervent proponent of improving the translational research environment to align clinical care with research goals. The David H. Koch Center for Applied Research of Genitourinary Cancers, of which he is Director, reflects the success achieved by thoughtful physician and scientist recruitments, productive intramural and extramural collaborations; education and training of young investigators, and development of critical common resources.

Dr. Logothetis received his MD degree from the University of Athens (Greece) and completed internship and residency training at Cook County Hospital in Chicago. On completion of his fellowship at M. D. Anderson Cancer Center, he joined the faculty.

1992-present Professor, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX.





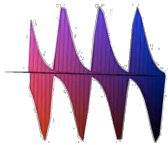
Wen-Xiu Ma, Ph.D.
Professor,
University of South Florida
Email: mawx@cas.usf.edu

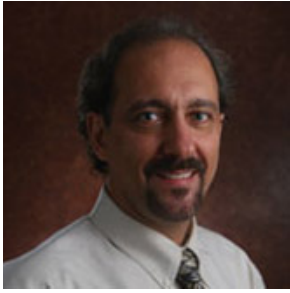
Title: Soliton Equations, Variational Identities and Hamiltonian Formulations

Wen-Xiu Ma is Professor of Mathematics at University of South Florida, USA. He received his undergraduate degree from University of Science and Technology of China, Hefei, in 1982, and earned his Ph.D. from Computer Center of Chinese Academy of Sciences in Beijing 1990. He did a postdoctoral fellow at Fudan University, Shanghai, under the direction of Professor Chaohao Gu, during 1990-1992; and then research fellow at University of Paderborn, Germany, under the direction of Professor Benno Fuchsteiner, from 1994-1996. As Professor of Mathematics, he taught at Shanghai Jiaotong University from 1985-1987, Fudan University from 1992-1994, and City University of Hong Kong from 1997-2002. Since 2002, he moved to teach at University of South Florida (USF), USA. He held guest and visiting professorships at Chinese Academy of Sciences, Shanghai Jiaotong University, Shandong University of Science and Technology, Zhejiang Normal University, Shanghai University and National Huaqiao University, and a chair professorship at Fudan University awarded by the State Administration of Foreign Experts Affairs.

Professor Ma received a Chinese national postdoctoral scholarship (class A) in 1990, a youth award from the International Mathematical Union in 1993, the Alexander-von Humboldt research fellowship in Germany in 1993, the Shanghai Government Qimingxing fellowship in 1994, the new century award from Barons Who's Who in 1999 and the Who's Who medal from the Who's Who Institute in 2000. He won the first place award during an open mathematical competition in Shanghai in 1977. He was elected deputy director of the youth work committee of the Chinese Mechanical Society in 1991-1995, member of the work committee of Shanghai Center for Nonlinear Science in 1993-1997, chair of USF Asian Alliance in 2004, and president of Chinese-American Association of Tampa Bay in 2006. He has been a member of the Chinese Mathematical Society, the American Mathematical Society, the International Association of Mathematical Physics, the Mathematical Association of America, and the Society of Industrial and Applied Mathematics.

Professor Ma's research ranges from mathematical physics through applied mathematics to nonlinear sciences. He published more than 200 research articles and 3 monographs. He received the best paper award at the 1st national congress of young researchers of the Chinese Society of Science and Technology in 1992, the Forward award of excellence for research from Fudan University in 1996 and 2003, and the faculty development award from USF in 2008. His one recent article was selected as one of the 100 most influential international papers by China Ministry of Science and Technology in 2010, and reported and featured as a Fast Breaking Paper in 2011 by ScienceWatch.com of Thomson Reuters. He has been reviewer for science foundations of different counties including China, USA, Japan, Turkey, Canada, Chile, and England.





George Maracas, Ph.D.
Program Director
National Science Foundation
Energy,
Power Adaptive Systems
Electrical, Communications,
Cyber Systems Division/ENG
Email: gmaracas@nsf.gov

Title: Global Energy

George Maracas is a Program Director in the Energy, Power and Adaptive Systems (EPAS) area within the Division of Electrical, Communications, and Cyber Systems (ECCS) at the National Science Foundation. Dr. Maracas joined NSF from Arizona State University in January of 2010. His program is in Energy, Power and Adaptive Systems and supports research in renewable energy collection, conversion and interfaces to the electric power grid. He is also Program Director for the Sustainable Energy Pathways Program. At Arizona State University he is on the Faculty of the School of Electrical, Computer and Energy Engineering (ECEE) and a Senior Sustainability Scientist in the School of Sustainability.

Dr. Maracas received his Ph.D. in Electrical Engineering from Cornell University (1982) and a B.A. in Physics from New York University (1977). In 1982 he joined North Carolina State University in the Department of Electrical and Computer Engineering. In 1984 joined the Arizona State University Department of Electrical Engineering where he became Associate and Full Professor.

In 1994 Dr. Maracas joined Motorola where he established the Molecular Technology Lab which had programs in quantum devices, molecular self-assembly and molecular diagnostics. He was the Founder and Director of Advanced Technologies of Motorola Life Sciences. In 2005 he became Director of Nanotechnology at Motorola Labs where he was responsible for coordinating Corporate R&D efforts in nanotechnology.

Dr. Maracas received the Motorola Master Innovator award, elected to the Motorola Scientific Advisory Board Associates (SABA) and received the National Science Foundation Presidential Young Investigator award. He received the Green Pioneer Award for his contributions to furthering research, education and the Solar economy in Arizona and NSF Director's Award "Collaborative Integration for Accelerating Innovation Research." He is a Senior Member of IEEE and has authored/co-authored over 110 technical publications and presentations, 2 book chapters and holds 33 issued US patents.





Demetrios Papacostas,
President and CEO, ELVO,
Greece
Email:
papacostas.demetrios@gmail.com

Title: The Future of Energy in a Globalized World

Demetrios Papacostas was born in Thessaloniki, Greece, in 1952. He graduated from the Experimental School of the University of Thessaloniki in 1970.

He studied in the USA with a Fulbright scholarship and has a BSc degree in Physics and Mathematics from Muhlenberg College in Allentown Pennsylvania (1974), and a BSc and a MSc degree in Mechanical Engineering from Lehigh University in Bethlehem Pennsylvania (1977). He specialized in automatic control systems, dynamics and computer-aided design. He worked as a teaching assistant for 3 years. His research was focused in the design of automatic control systems for military airplanes.

He worked from 1978 to 1997 in various technical and managerial positions at the chemicals and refinery industrial complex of ESSO Pappas (EKO) in Thessaloniki, from 1997 to 2000 as manager of industrial and energy sector for General Construction Company (GEK) in Athens, and from 2000 to 2007 in the THEMELIODOMI group of companies as general manager of energy sector and as the founder and Managing Director of the photovoltaics manufacturing company HELIODOMI. From 2007 to 2010 he has worked as a consultant for industrial and energy projects in Greece and abroad. He is currently President and CEO of Hellenic Vehicle Industry (ELVO), a national defense industry that manufactures military and civil vehicles.

He served as a member of the Environment and Renewable Energy committee of the National Advisory Council for Research and Development, as a member of the Board of Directors of the Inter-Balkan and Black Sea Business Center (DIPEK) representing the Greek Ministry of Economy, and as a founding member and Vice President of the Hellenic Association of Photovoltaic Companies (HELAPCO). He is general secretary of the Hellenic Aerospace and Defense Industries Group (HASDIG), and member of the energy committee of the Federation of Industries of Northern Greece (FING).



He is also active in various professional and social organizations in Greece and abroad.

He speaks Greek, English, French, German and Italian.



Gideon Samid, Ph.D.
Professor, Chief Technology
Officer BitMint Ltd:
Bit Wise Money, Israel
Email:
samidg@tx.technion.ac.il

**Title: Resisting Knowledge Realization Momentum-
The Secrete and the Scope of Non-Linear Discovery
“First International Prize of Innovation for 2011”**

Prof. Gideon Samid, PhD, PE, has charted a path broad and deep into a variety of engineering disciplines from oil and energy, to spacecraft, process control, artificial intelligence, computer security, cryptographic tools, and most recently digital currency. Today Gideon Samid serves as the Chief Technology Officer for BitMint Ltd – a universal electronic currency. Schooled in the Technion -- Israel Institute of Technology, worked in large frameworks: NASA, Exxon, and developed a boutique field: innovation appraisal, and The Universal Theory of Innovation, which in turn he used to secure patents, inventions, and discoveries in diverse fields. Prof. Samid also pioneers innovative free online education based on networked hierarchies of multi-media pages with short snippets of videos replacing the traditional long exhaustive e-lectures, and with built-in multiple-choice fair-grading quizzes. Prof. Samid main message is that our knowledge-realization pathway creates a momentum that accelerates linear extrapolation discoveries, but decelerates knowledge-realization on the off-path, where non-linear ground braking novelty is to be found. Mindful of this momentum, we need to counteract its limiting influence. Prof. Samid is co-founder of FiiMA -- The First International Innovation Management Alliance, dedicated to the idea that innovation is a shared universal culture, and the common pathway to peace and prosperity.





Elias Stefanakos, Ph.D.
Professor of Electrical
Engineering and
Director of the Clean Energy
Research Center (CERC)
University of South Florida
Email: estefana@usf.edu

Title: Solar Power Plants and Energy Storage for Global Energy Needs

Dr. Elias Stefanakos is presently Professor of Electrical Engineering and Director of the Clean Energy Research Center (CERC) at the University of South Florida (USF) located in Tampa, Florida, USA. Up to August 2003 and for 13 years he was Chairman of the Department of Electrical Engineering at USF. He is an Associate Editor of the Journal of Solar Energy; Co-Editor-USA, Journal of Asian Electric Vehicles; and past Vice President, Academic Affairs, American Foundation for Greek Language and Culture. He has published over 150 research papers in refereed journals and international conferences in the areas of materials, renewable energy sources and systems, renewable energy storage, hydrogen and fuel cells, and electric and hybrid vehicles. He has received over \$14 million in contracts and grants from agencies such as, National Science Foundation (NSF), US Department of Energy (USDOE), National Aeronautics and Space Administration (NASA), Defense Advanced Research Projects Agency (DARPA), and others. He has been a consultant to a number of companies and international organizations. CERC is an interdisciplinary center whose mission is the development of clean energy sources and systems with emphasis on technology development and technology transfer.





Chris P. Tsokos, Ph.D.
Distinguished University
Professor of Mathematics and
Statistics,
Director of Urban Scholars
Outreach Program
University of South Florida
Email: ctsokos@usf.edu
Website:
<http://shell.cas.usf.edu/~ctsokos/>

Title: Global Warming: Myth or Reality?

Dr. Tsokos is Distinguished University Professor of Mathematics and Statistics at the University of South Florida. He obtained his undergraduate degree in Engineering Sciences and his Master of Science in Mathematics from the University of Rhode Island and his Doctoral Degree in Probability and Statistics from the University of Connecticut. Dr. Tsokos is the author of more than 300 publications in academic journals. He has written 15 textbooks and research monographs and more than 40 technical publications. He served as Doctoral Advisor for more than 40 students from twelve different countries. He has served and is currently serving in more than 12 academic international journals. Dr. Tsokos has lectured in several countries with extensive invited lecture tours in the P.R. of China, Turkey, the Russian Academy of Science, and India among others. He has been an advisor and consultant for NASA, NSF, NIH, ONR, US Air Force, US Army, EPA, ACS, as well as several Fortune 500 companies. He is a member of several professional societies, which include a Fellow of the American Statistical Association and the International Statistical Institute, among others. He is the recipient of several distinguished honors and awards for his professional, educational and humanitarian accomplishments.





Title: Trigonometric Collocation For Nonlinear Riemann-Hilbert Problems On Doubly Connected Domains

Born 1936 in Poznan, Poland.

1955-1961 Mechanical Engineering and Mathematics at the Technische Universität, Berlin, there 1965 PHD, 1969 Habilitation and 1970 Professor.

Wolfgang L. Wendland, Ph.D.
Professor,
University of Stuttgart,
Germany
Email:
wendland@mathematik.uni-stuttgart.de

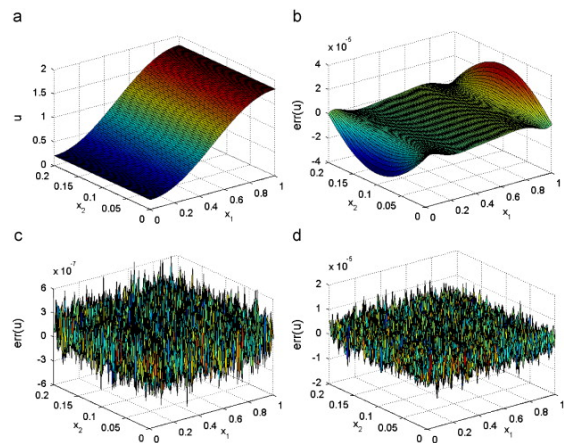
1970-1986 Chair/professor, Mathematics, Technische Universität Darmstadt.

1986-2004 Chair/professor, Mathematics, Universität Stuttgart, there since 2004 Professor Emeritus.

1999 Doctor honoris causa, Babes Bolyai University in Cluj-Napoca, Romania.

Guest professorships at the Universities of Delaware in Newark and Oregon State University, USA and at Babes Bolyai University in Cluj-Napoca, Romania.

For further information see www.ians.uni-stuttgart.de/index.shtml





Christos S. Zerefos, Ph.D.
Professor, Academy of
Athens, GREECE
Email: zerefos@geol.uoa.gr

Title: The Coincidence of The Environmental and The Economic Crisis. Present and Future

Christos S. Zerefos was born in Cairo, Egypt and graduated in Physics from the University of Athens. MSc in Meteorology and Ph.D. in Physics-Meteorology, University of Athens. Post Doctoral researcher, National Center for Atmospheric Research (NCAR) and other Research Institutions in Greece and abroad. Professor of Atmospheric Physics at the Universities of Thessaloniki and Athens, visiting Professor at the Universities of Boston, Minnesota (USA) and Oslo (Norway).

Member of the Academy of Athens, the Norwegian Academy of Sciences and Letters, the Academia Europaea, the Russian Academy of Natural Sciences, the International Academy of Astronautics and other Academies and research Institutions. Fellow of the Institute of Physics (UK) and Life Member of the American Geophysical Union.

Global Ozone Award from the United Nations Environment Programme (1997), Award of the European Physical Society and the Balkan Physical Union (2006), Honourable Mentions from the United Nations Environmental Program in 1995 and in 1998. Award Certificate and Letter from UNEP and from IPCC (2008) for his substantial contribution to the reports of IPCC, which shared the Nobel Peace Prize (1997), Honorary Degree of Doctor of Humane Letters, University division of the American College ANATOLIA (2008), Distinction from the Ministry of Education of Cyprus (2008), Honorary Mention from the Russian Academy of Natural Sciences (2009), Gold Medal of the Municipality of Thessaloniki (2009), Distinction from the Municipality of Panorama, Thessaloniki (2010), City Medal of the Municipality of Athens (2010), Distinction from the Ministry of Education of the Arab Republic of Egypt (2010). His proposal for the Geostrophysics Museum at the National Observatory has been awarded with the 2010 European Union Prize for Cultural Heritage / Europa Nostra Award.





GLOBAL HEALTH

**International Federation of Nonlinear Analysts
IFNA**

**Department of Mathematics, the National and Kapodistrian
University of Athens, Greece**

Athens, Greece June 26-27, 2012

Tuesday

June 26, 2012

“Statistical Analysis and Modeling of Brain Cancer”



Session I: A11

Date: June 26, 2012

Time: 10:00-12:55 AM

Organizer & Chair: Keshav Pokhrel and Dimitrios Vovoras

Cancer Research Team Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: kpokhrel@mail.usf.edu, dvovoras@mail.usf.edu

10:00-10:35AM

Incidence of Primary Brain and Central Nervous System Tumors and Statistical Analysis by the Patient's Race, Sex and Age

Dimitrios Vovoras, Faculty, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: dvovoras@mail.usf.edu

10:35 -11:10 AM

Spatial Models Applied on Modern Epidemiological Research. An Example of Malignant Neoplasms of Larynx, Trachea, Bronchus and Lung

Georgia Pistolla, Ph.D. Student, University of Crete, Department of Medicine, Greece

Email: geopist@gmail.com

11:10-11:45 AM

Primary Brain Tumors: Diagnosis and Treatment

Alexiou George, Department of Neurosurgery, University Hospital of Ioannina, Ioannina, Greece
Email: alexiougrg@yahoo.gr

11:45-12:20 PM

Primary Brain Tumors: Epidemiology and Clinical Presentation

Maria Varela, Department of Neurosurgery, Children's Hospital "Agia Sofia", Athens, Greece

12:20-12:55 PM

Regional Trends in Incidence of Pediatric Brain and Central Nervous System Cancer in USA

Keshav Pokhrel, Cancer Research Team, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA
Email: kpokhrel@mail.usf.edu

1:15-2:15 PM

Lunch

KEYNOTE SPEAKERS

Amphitheatre/K. Karatheodori

2:15-3:15 PM

Reconsidering the Approach to Meeting the Prostate Cancer Challenge

Dr. Christopher J. Logothetis, M.D.

Department Chair, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, the University of Texas MD Anderson Cancer Center, Houston, TX

Roy M. and Phyllis Gough Huffington Clinical Research in Urologic Oncology Distinguished Chair, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX

Professor, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX **E-mail:** clogothe@mdanderson.org

3:15 -4:15 PM

Has the Time Come to Give up Blinding in Randomized Clinical Trials?

Dr. Nancy Geller

Director of the Office of Biostatistics Research of the National Heart, Lung, and Blood Institute (NHLBI)
Email: nancy.geller@nih.gov

4:15-4:30 PM

Break

4:30-6:30 PM

Round Table Discussion

Amphitheatre/K. Karatheodori

IFNA WORLD CONGRESS 2012



Department of Mathematics, University of Athens

Round Table Discussion

June 26, 2012, 4:30 PM - 6:30 PM

Moderator: Dr. Christopher J. Logothetis

Director of Genitourinary Cancer and Prostate Cancer, M.D. Anderson Cancer Center, Houston, Texas



Panel:

Dr. Christopher J. Logothetis

Director of Genitourinary Cancer and Prostate Cancer, M.D. Anderson Cancer Center, Houston, Texas

Dr. Nancy L. Geller

Director of the Office of Biostatistics Research of the National Heart, Lung, and Blood Institute

Dr. Nicholas Askounes Ashford

Professor of Technology and Policy, MIT, USA

Dr. Panagiotis Behrakis

University of Athens, Medical School

“Human and Animal Disease Model”



Session II: A12
Date: June 26, 2012
Time: 10:00-12:35 PM

Organizers & Chairs:

Vassilis G. Gorgoulis

Professor, Laboratory of Histology-Embryology Molecular Cardiogenesis Group, Medical School, National and Kapodistrian University of Athens, Biomedical Research Foundation Academy of Athens, Email: vgorg@med.uoa

Anastasios Kalofoutis: Professor, Dept. of Biological Chemistry School of Medicine, University of Athens
Email: info@IBRE.gr

10:00-10:35 AM

Mitochondria as a Target for Development of Therapeutic Strategies for Heart Failure

Semie Capetanakis, Adjunct Professor of Molecular and Cellular Biology of Baylor College of Medicine and Director of the Center of Basic Research I, Biomedical Research Foundation, Academy of Athens
Email: yassemic@bcm.tmc.edu

10:35-11:10AM

Beneficial Effects of the Stress Hormone CRH in Inflammation and Metabolism

Katia Karalis, Investigator - Associate Professor Level, Assistant Professor in Pediatrics, Harvard Medical School USA, Research Associate Children's Hospital and MGH, Boston USA, Developmental Biology, Center of Basic Research I Biomedical Research Foundation, Academy of Athens
Email: katiakaralis@gmail.com

11:10-11:25AM

Break

11:25-12:00 PM

Genetics, Pathogenesis and Novel Therapeutic Targets in Dilated Cardiomyopathy

Despina Sanoudou, Investigator- Assistant Professor Level, Molecular Biology, Center of Basic Research, Biomedical Research Foundation, Academy of Athens
Email: dsanoudou@bioacademy.gr

12:00-12:35 PM

Physiology of Quiet Breathing: Focus on Inertia

Panayotis Behrakis, Professor of Medicine/physiology, Medical School, University of Athens President of ENSP
Email: pbehraki@hsph.harvard.edu

1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christopher J. Logothetis)

3:15-4:15 PM **Keynote Speaker (Dr. Nancy Geller)**
4:15-4:30 PM **Break**
4:30-6:30 **Round Table Discussion**

“Heart Disease and Health Analysis”



Session III: Amphitheatre
Date: June 26, 2012
Time: 10:15-12:00 PM

Organizer & Chair: **Bong-Jin Choi**
Cancer Research Team, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA
Xinyu Zhao
University of Washington, Seattle
xzhao@waisman.wisc.edu, bchoi@mail.usf.edu

10:15-10:50 AM

Hybrid Algorithms for Classification of Heart Diseases: A Data Mining Approach for Detecting Abnormal Heart Conditions

Suresh Khator, Associate Dean, Graduate Programs and Computing Facilities, Associate Dean at University of Houston
Email: skhator@uh.edu

10:50-11:25 AM

Optimal Drug Scheduling in Cancer Treatment

Metin Salamci, Professor, Gazi University, Turkey
Email: msalamci@gazi.edu.tr

11:25-12:00 PM

Methodological Patterns of Analysis of Data in the Health Area

Georgia Pistolla, University of Crete, Department of Medicine, Greece
Email: geopist@gmail.com

1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christopher J. Logothetis)

3:15-4:15 PM

Keynote Speaker (Dr. Nancy Geller)

4:15-4:30 PM

Break

4:30-6:30 PM

Round Table Discussion

“Cancer Session”

Session I: A11

Date: June 27, 2012

Time: 10:00-11:10 AM



Organizer & Chair:

Efstathios Patsouris

Professor of Surgery, Breast Unit, 1st Department of Propaedeutic Surgery, Hippokratio Hospital, Medical School, University of Athens

Email: epatsouris@med.uoa.gr

Nikos M. Siafakas

Professor of Thoracic Medicine, University General Hospital, Medical School, University of Crete

Email: siafak@med.uoc.gr

10:00 -10:35 AM

High Throughput Techniques for Autoimmunity and Inflammation Lessons Learned

Dimitrios Boumpas, Professor of Medicine, Director, Internal Medicine/Rheumatology, Clinical Immunology and Allergy, Medical School, University of Crete, Faculty of Medicine

Email: boumpasd@med.uoc.gr

10:35-11:10 AM

The Correlation between Metabolic Syndrome and Prostate Cancer: A Molecular Evidence-Based Approach at the Protein Level

Spyros Garbis, Investigator –Lecturer Level Biotechnology, Center of Basic Research II, Biomedical Research Foundation, Academy of Athens

Email: sgarbis@bioacademy.gr

11:10-11:25 AM

Break

“Medical Imaging”



Organizer & Chair:

Panayotis Balas

Professor Emeritus of Surgery, Medical School, University of Athens

Email: pbalas@bioacademy.gr

Panos Vardas

Professor of Cardiology, Heraklion University Hospital, Greece

Email: cardio@med.uoc.gr

Session I: A11

Date: June 27, 2012

Time: 11:25-1:10 AM

11:25-12:00 PM

PET-CT in the Evolution of Treatment in Malignancy and in Inflammation

Sofia Chatziioannou, Affiliated Investigator - Assistant Professor Level
Nuclear Medicine - Positron Emission Tomography, Center of Basic Research II, Biomedical Research Foundation, Academy of Athens
Email: sofiac@bcm.tmc.edu

12:00-12:35 PM

Assessment of Myocardial Perfusion and Viability by Positron Emission Tomography

Constantinos Anagnostopoulos, Associate Professor, Consultant Physician in Nuclear Medicine, Nuclear Medicine Division, PET/CT Clinical Research Center, Biomedical Research Foundation, Academy of Athens
Email: cdanagnostopoulos@bioacademy.gr

12:35-1:10 PM

CT/MR in the Study of Aortic Aneurysms

Lambros Vlahos, Professor Emeritus, Radiology, University of Athens, Director Imaging Dept, Biomedical Research Foundation Academy of Athens
Email: Lamvlahos@gmail.com

1:15-2:15 PM

Lunch

KEYNOTE SPEAKER

Amphitheatre/K. Karatheodori

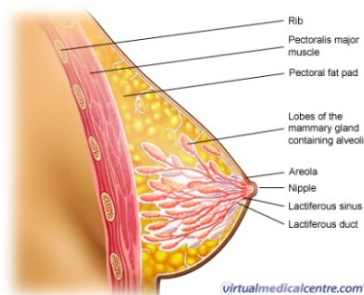
2:15-3:15 PM

Philosophers and Physicians: The Best Doctor is also a Philosopher

Dr. Christos Evangeliou

Honorary President of IAGP, Towson University, USA
Email: ceangeliou@towson.edu

“Statistical Analysis of Breast Cancer”



Session I: A11
Date: June 27, 2012
Time: 3:15-5:00 PM

Organizer & Chair: Taysseer Sharaf

Cancer Research Team Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA
Email: tsharaf@mail.usf.edu

3:15-3:50 PM

Longitudinal Data Analysis of Breast Cancer

Ram Kafle, Cancer Research Team, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA
Email: rckafle@mail.usf.edu

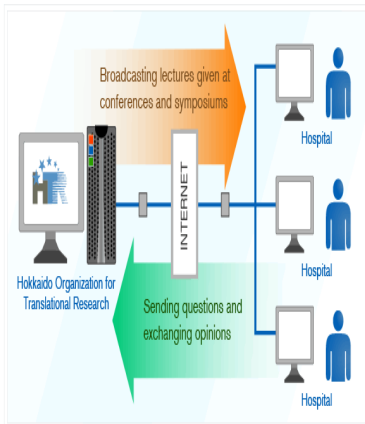
3:50-4:25 PM

Breast Cancer Screening: The Gail Model vs. Neural Network

Taysseer Sharaf, Cancer Research Team, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: tsharaf@mail.usf.edu

“Translational Research”



Session I: A11

Date: June 27, 2012

Time: 5:00-7:20 PM

Organizers & Chairs:

Dean: Professor Meletios A.C. Demopoulos

Medical School, National, and Capodistrian University of Athens

Email: cdimop@med.uoa.gr

Leonidas Stefanis

Associate Professor of Neurology, Director of Laboratory of Neurodegenerative Diseases, Biomedical Research Foundation the Academy of Athens

Email: lstefanis@bioacademy.gr

5:00-5:35 PM

Animal Models in Transplantation Research

Alkis Kostakis, Professor Emeritus, Surgery, Medical School, University of Athens, Director Dept of Experimental Surgery, Biomedical Research Foundation of Athens

Email: akostakis@bioacademy.gr

Nikos Kostomitsopoulos, Staff Research Scientist - Professor Level, Laboratory Animal Facilities Center Biomedical Research Foundation, Academy of Athens of Experimental Surgery Biomedical Research Foundation, Academy of Athens

Email: nkostom@bioacademy.gr

5:35-6:10 PM

Cell and Gene Therapy: Pre-Clinical Studies

Nicholas Anagnou, Professor of Biology, And Head Laboratory of Biology, University of Athens, School of Medicine, Group Leader Laboratory of Cell and Gene Therapy , Biomedical Research Foundation Academy of Athens

Email: anagnou@med.uoa.gr

6:10-6:45 PM

The Past, the Present and the Future of the Cord Blood Bank

Aikaterini Stavropoulos-Giokas Director, Hellenic Cord Blood Bank, Biomedical Research Foundation, Academy of Athens

Email: cstavrop@bioacademy.gr

6:45-7:20 PM

Pharmaceutical Consumption and Pharmaceutical Expenditures in Greece

Yannis Tountas, Associate Professor of Social Medicine, Medical School- University of Athens, President, National Organisation for Medicine Pharmaceutical Consumption and Pharmaceutical Expenditures in Greece (EOF)

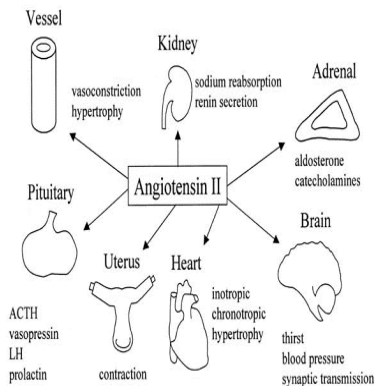
Email: ytountas@med.uoa.gr

“Human Physiology and Pathophysiology”

Session II: A12

Date: June 27, 2012

Time: 10:00-1:10 PM



Organizers & Chairs:

Kostas Gourgoulis

Associate Professor, Dept of Respiratory Medicine, Medical School, University of Thessaly

Email: kgourg@med.uth.gr

Zoi Papadopoulou -Daifoti

Professor of Pharmacology, Director of the Dep. of Pharmacology, Medical School, University of Athens

Email: zdaifoti@med.uoa.gr

10:00-10:35 AM

Cardiac Remodeling

Dennis V. Cokkinos, Professor of Cardiology Emeritus, Medical School, University of Athens Honorary Director of Onassis Cardiac Surgery Center, Director Heart and Vessel Cardiovascular Department, Biomedical Research Foundation Academy of Athens

Email: dcokkinos@bioacademy.gr

10:35-11:10 AM

Expiratory Flow Limitation and Hyperinflation: A Key Target for Treatment?

Nicholas Koulouris, 1st Department of Respiratory Medicine, Sotiria Hospital, Medical School, University of Athens

Email: koulnik@med.uoa.gr

11:10-11:45 AM

Protein degradation Systems in the Pathogenesis of Parkinson’s Disease

Leonidas Stefanis, Associate Professor of Neurology, Director of Laboratory of Neurodegenerative Diseases Biomedical Research Foundation of the Academy of Athens

Email: lstefanis@bioacademy.gr

11:45-12:00 PM

Break

12:00-12:35 PM

The Pathophysiology of Sickle Cell Disease

Dimitri Loukopoulos Affiliated Investigator - Emeritus Professor, Group Leader Hematology –Oncology, Biomedical Research Foundation, Academy of Athens

Email: dloukop@bioacademy.gr

12:35-1:10 PM

Integration of the Stress Response

George Chrousos Chief, Laboratory of Endocrinology, Metabolism and Diabetes
Biomedical Research Foundation, Academy of Athens
Email: chrousos@gmail.com

1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christos Evangeliou)

“Human and Animal Disease Model”



Organizers & Chairs: **Michael Kotarinos**

Cancer Research Team

Department of Mathematics and Statistics, University of South Florida, Tampa,
Email: Florida, USA

mkotarin@mail.usf.edu

Session II: A12

Date: June 27, 2012

Time: 3:15-5:00 PM

3:15-3:50 PM

Stochastic Analysis of Cervical Cancer Screening Guidelines

Giuseppe Travaglini, Università di Urbino Carlo Bo Dipartimento di Economia e Metodi Quantitativi
Email: giuseppe.travaglini@uniurb.it

3:50-4:25 PM

Image Reconstruction Techniques in Medical Diagnosis

Tanuja Srivastava, Department of Mathematics, IIT, Roorkee, India
Email: tanujfma@iitr.ernet.in

4:25-5:00 PM

Molecular Mechanism that Regulate Neural Stem Cells and Neurodevelopment

Xinyu Zhao, Professor, University of Washington, Seattle
Email: xzhao@waisman.wisc.edu

“Medical Imaging”



Organizer & Chair: **Peihua Qiu**

Professor, School of Statistics, University of Minnesota, USA
Email: qiuxx088@umn.edu

Session II: A12

Date: June 27, 2012

Time: 5:00-6:45 PM

5:00-5:35 PM

Robust Event related FMRI Designs under a Nonlinear Model

Ming-Hung Kao, School of Mathematical and Statistical Sciences, Arizona State University

Email: mkao@asu.edu

5:35-6:10 PM

Segmentation and Intensity Estimation for Microarray Images with Saturated Pixels

Yan Yang, Professor, School of Mathematical and Statistical Sciences, Arizona State University

Email: yan.yang@asu.edu

6:10-6:45 PM

Nonparametric Image Regression

Peihau Qui, Professor, School of Statistics, University of Minnesota

Email: quixx008@umn.edu

“Modern Epidemiological Research”

Session III: Amphitheatre

Date: June 27, 2012

Time: 10:05-1:15 PM



Organizer & Chairs:

Suresh Khator

Associate Dean, Graduate Programs and Computing Facilities, University of Houston, USA

Email: skhator@uh.edu

Gokarna Aryal

Professor, Purdue University Calumet, IN, USA

Email: aryalg@purduecal.edu

10:05-10:40 AM

Non-Linear Models Applied on Mortality Time Series in Greece from 1932-2009

Dimitra Sifaki-Pistolla, Geographer, Department of Medicine in Social Medicine Laboratory, Greece

Email: Spdimi11@gmail.com

10:40-11:15 AM

Stochastic Analysis of Cervical Cancer Screening Guidelines

Giuseppe Travaglini, Professor in Economics, Universidad de Los Andes, Colombia

Email: r.akhavan@nuiandes.edu.co, giuseppe.travaglini@uniurb.it

11:15-11:30 AM

Break

11:30-12:05 PM

Cancer Mortality in 180 Countries of the World Investigated Through Spatial Autocorrelation Models. Is there a Clustered Pattern of Cancer?

Dimitra Sifaki-Pistolla, Geographer, Department of Medicine in Social Medicine Laboratory, Greece

Email: Spdimi11@gmail.com

12:05-12:40 PM

Statistical Algorithm for Determining the Optimal Doses of Drug

Bong-Jin Choi, Cancer Research Team, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: bchoi@mail.usf.edu

12:40-1:15 PM

How Research in Public Health Could be More Effective? An Innovative Example of Mathematical and Spatial Analysis of Mortality Rates of Ischemic Heart Disease, in Greece in 2007

Dimitra Sifaki-Pistolla, Geographer, Department of Medicine in Social Medicine Laboratory, Greece

Email: Spdimi11@gmail.com

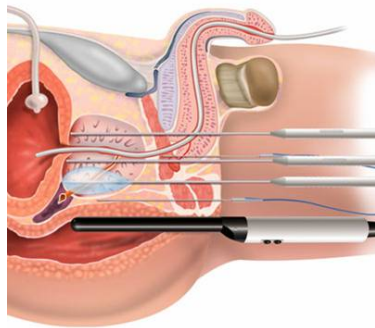
1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christos Evangeliou)

“Prostate Cancer”



Session III: Amphitheatre

Date: June 27, 2012

Time: 3:15-5:00 PM

Organizer & Chair: **Nana Osei Bonsu and Yiu Ming Chan**

Cancer Research Team

Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: nbonsu@mail.usf.edu , ychan2@mail.usf.edu

3:15-3:50 PM

Cancer Research and Mathematical Sciences

Chris P. Tsokos, Professor, Department of Mathematics and Statistics, University of South Florida

Email: ctsokos@usf.edu

3:50-4:25 PM

Parametric Survival Analysis: A Comparison of Prostate Cancer Survival by Race

Yiu Ming Chan, Cancer Research Team, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: ychan2@mail.usf.edu

4:25-5:00 PM

Statistical Evaluation of Different Prostate Cancer Treatment

Nana Osei Bonsu, Cancer Research Team, Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: nbonsu@mail.usf.edu

5:00-5:35 PM

Biochips for AIDS Monitoring in the Developing World

Nikolaos Chronis, Professor, Department of Mechanical Engineering, University of Michigan, Michigan, USA

Email: chronis@umich.edu



GLOBAL ENVIRONMENT

**International Federation of Nonlinear Analysts
IFNA
Athens Chamber of Commerce & Industry
7 Academias St., 10671, Athens, Greece
June 26 & 28, 2012**

Tuesday June 26, 2012

9:00-9:15 AM

Welcome Remarks

Hall A (8th Floor)

Mr. Constantinos Michalos

President of Athens
Chamber of Commerce &
Industry (ACCI)

Dr. Dennis Koutras

Chairman, IFNA World
Congress 2012

“Analysis and Modeling of Environmental Problems”



Session I: Lecture Hall A (8th Floor)

Date: June 26, 2012

Time: 9:15-2:40 PM

Organizer & Chair: **Rebecca D. Wooten**

Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

rwooten@usf.edu

9:15-9:50AM

Pollution Control: Target and Dynamics

Travaglini Giuseppe, Professor of Economics, Department of Economics Society and Politics - DESP Organization/ University of Urbino Carlo Bo, Italy

Email: gian.bischi@uniurb.it

9:50-10:25AM

Wave Propagation of Cellular Neural Network Model of Tsunamis

Angela Slavova, Professor, Institute of Mathematics, Bulgarian Academy of Science, Bulgaria

Email: slavova@math.bas.bg

10:25-11:10AM

Determinants of the Earth's Climate Dynamics: Outline

Richard Mackey, Australia

Email: richard.mackey@immi.gov.au

11:00-11:15 AM

Break

11:15-11:50AM

Markov Dynamics of Ecological Models with Dispersion and Competition

Jurij Kozicki, Professor, Maria Curie-Sklodowska University, Poland

Email: jkozi@hektor.umcs.lublin.pl

11:50-12:25PM

Information Geometric Methods for Environmental Application

George Galanis, Professor, Hellenic Naval Academy, Greece

Email: ggalanis@mg.uoa.gr

12:25-1:30 PM

Lunch

1:30-2:05PM

Citizens for a Better Environment

Peter Sinkamba, Uzbek Academy of Science, Zambia

Email: cbezambia@hotmail.com or p_sinkamba@yahoo.com

2:05-2:40PM

Parametric Analysis of Tornado Activity in the United States

Rebecca D. Wooten, Department of Mathematics and Statistics, University of South Florida, USA

Email: rwooten@usf.edu

2:40-3:00 PM

Break

KEYNOTE SPEAKERS

Auditorium

3:00-4:00 PM

A Bifurcation Point for the Evolving Global Family, the Ternary System of Environment-Energy-Population

Dr. Stavros Kalogeropoulos, Professor, School of Environment and Technology,

University of Brighton, UK

Email: stevekalogeropoulos@gmail.com

4:00-5:00 PM

Transforming the Industrial State: The Next Steps in Addressing the Sustainability Crisis

Dr. Nicholas Askounes Ashford, Professor of Technology and Policy, MIT, USA

Email: nashford@mit.edu

5:00-5:15 PM

Break

5:15-6:15 PM

The Coincidence of the Environmental and the Economic Crisis: Present and Future

Dr. Christos Zerefos, Professor of Atmospheric Physics, University of Thessaloniki and Athens,
Academy of Athens

Email: zerefos@academyofathens.gr

6:15-7:15 PM

Global Warming: Myth or Reality?

Dr. Chris P. Tsokos,

Distinguished University Professor, University of South Florida, USA

Email: ctsokos@usf.edu

7:15-7:30 PM

Break

7:30-9:30 PM

Round Table Discussion

Auditorium

IFNA WORLD CONGRESS 2012



Athens Chamber of Commerce & Industry

Round Table Discussion

June 26, 2012, 7:30 PM – 9:30 PM

Moderator: Dr. Chris P. Tsokos

Distinguished University Professor, University of South Florida, USA



Panel:

Dr. Renu Khator

Chancellor and President, University of Houston System

Dr. Nicholas Askounes Ashford

Professor of Technology and Policy, MIT, USA

Dr. Christos Zerefos

Biomedical Research Foundation, Academy of Athens

Dr. Stavros Kalogeropoulos

School of Environment and Technology, University of Brighton, UK

Dr. Panagiotis Behrakis

University of Athens, School of Medicine

“Analysis and Modeling of Environmental Problems” (cont.)



Session I: Lecture Hall A (8th Floor)

Date: June 27, 2012

Time: 9:00-12:40 PM

Organizer & Chair: **Rebecca D. Wooten**

Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: rwooten@usf.edu

9:00-9:35 AM

The Kinematics of the Consolidation Process of Shredded Waste in the Conical Channel

Ireneusz Malujda, Chair of Basics of Machine Design Organization, Poznan University of Technology, Poland

Email: ireneusz.malujda@put.poznan.pl

9:35-10:10 AM

The Orthotropic Coefficients in Modeling the Process of Plasticization Anisotropic Material

Krzysztof Talaska, Chair of Basics of Machine Design Organization, Poznan University of Technology, Poland

Email: krzyztof.talaska@put.poznan.pl

10:10-10:45 AM

Using Copulas for Improved Geospatial Analysis and Prediction in Environmental Application

Juergen Pilz, Professor, University of Klagenfurt, Head of the Dept. of Statistics, Austria

Email: juergen.pilz@uni-klu.ac.at

10:45-11:00 AM

Break

11:00-11:35 AM

The Analysis of Stability Trends Change Indexes of Soils

Dr. Tatiana Mokritshaya, Faculty Geology and Hydrogeology, University of Dnipropetrovsk, Ukraine

11:35-12:05 PM

The Orthotropic Coefficients in Modeling the Process of Plastification Anisotropic Materials

Ireneusz Malujda and Krzysztof Talaska, Poznan University of Technology, Chair of Basic of Machine Design, Poland

Email: ireneusz.malujda@put.poznan.pl

12:05-12:40 PM

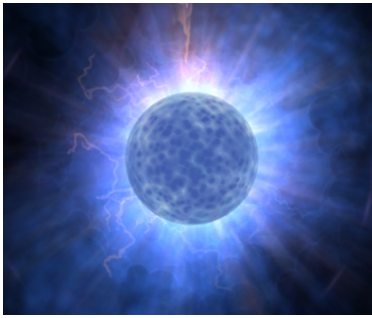
The Kinematics of the Consolidation Process of Shredded Waste in the Conical Channel

Marian Dudziak, Ireneusz Malujda, Krzysztof Talaska, Poznan University of Technology, Chair of Basic of Machine Design, Poland

Email: ireneusz.malujda@put.poznan.pl

12:40-1:40 PM

Lunch



GLOBAL ENERGY

International Federation of Nonlinear Analysts

IFNA

Athens Chamber of Commerce & Industry

7 Academias St., 10671, Athens, Greece

June 27, 2012

Wednesday

June 27, 2012

10:00-10:30 AM

Welcome Remarks

Auditorium

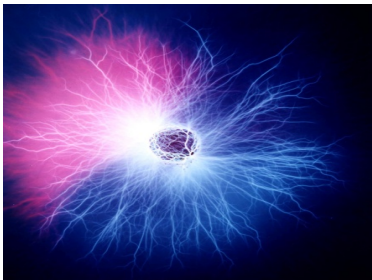
Mr. Constantinos Michalos

President of Athens
Chamber of Commerce &
Industry (ACCI)

Dr. Dennis Koutras

Chairman, IFNA World
Congress 2012

“SOLAR ENERGY STORAGE”



Session I: Lecture Hall A

Date: June 27, 2012

Time: 10:30-1:35 PM

Invited Session: Solar Energy Storage

Organizer & Chair: **Dr. Elias Stefanakos**

Director, Clean Energy Research Center, University of South Florida, USA

Email: estefana@usf.edu

10:30- 11:05 AM

Energy Storage for Solar Thermal Energy Utilization at Medium and High Temperature

E. Papanicolaou and Vasillios Belesiotis, Solar and Other Energy System Laboratory, National Center for Scientific Research (Demokritos), Greece

11:05- 11:40 AM

Large Stationary Batteries for Deployment in Grid-Connected Photovoltaic and Other Renewable Energy Power Plants

Christos Protopoulos, Phoenix Solar Greece, Athens, Greece

11:40 -11:50 PM

Break

11:50- 12:05 PM

The Role of the Energy Sector in the Promotion of Green Development and Security of Supply

Dinos Benroubi, Executive Director, General manager Protergia, S.A.

Email: Dinos.Benroubi@protergia.gr

12:05- 12:25 PM

The Role of the Energy Sector in the Promotion of Green Development and Security of Supply

Panayotis Kanellopoulos, Managing Director M&M Gas Co. S.A.

12:25- 1:00 PM

Thermal Energy Storage for Concentrated Solar Power - State of the Art and Innovative Concepts

Doerte Laing, German Aerospace Center (DLR), Institute of Technical Thermodynamics, Stuttgart, Germany

Email: doerte.laing@dlr.de

1:00- 1:35 PM

Energy Aspects in Modern Societies

Christina Papakosta, Sales Engineer, METKA S.A.

Email: papakosta.christina@gmail.com

1:35-2:45 PM

Lunch

KEYNOTE SPEAKERS

Auditorium

2:45- 3:45 PM

Solar Power Plants and Energy Storage for Global Energy Needs

Dr. Elias Stefanakos, Director, Clean Energy Research Center, University of South Florida, USA

Email: estefana@usf.edu

3:45-4:45 PM

Energy, Environment and Civilization

Dr. Loucas Christophorou, Academy of Athens

Email: christlg@otenet.gr

4:45- 5:45 PM

Energy Security: A Global Challenge

Dr. Renu Khator, Chancellor and President, University of Houston System

Email: rkhator@uh.edu

5:45-6:45 PM

Global Energy

Dr. George Maracas, Program Director

National Science Foundation, Energy, Power and Adaptive Systems, NSF

Electrical, Communications, Cyber Systems Division/ENG

Email: gmaracas@nsf.gov

6:45-7:45 PM

The Future of Energy in a Globalized World

Mr. Demetrios Papacostas, President and CEO, ELVO, Greece

Email: papacostas.demetrios@gmail.com

7:45-8:00 PM

Break

8:00 PM

Round Table Discussion

Auditorium

IFNA WORLD CONGRESS 2012



Athens Chamber of Commerce & Industry

Round Table Discussion

June 27, 2012, 8:00 PM – 10:00 PM

Moderator: Dr. George N. Maracas

Program Director, Energy, Power and Adaptive Systems, National Science Foundation, Washington, D.C



“Did The Greeks Invent Energy?”

Panel:

Dr. Renu Khator

Chancellor and President, University of Houston System

Dr. George N. Maracas

Program Director, Energy, Power and Adaptive Systems, National Science Foundation, Washington, D.C

Dr. Loucas Christophorou

Academy of Athens

Mr. Demetrios Papacostas

President and CEO, ELVO, Greece

Dr. Elias Stefanakos

Director, Clean Energy Research Center, USF



GLOBAL ECONOMY

**International Federation of Nonlinear Analysts
IFNA**

**The Athens Chamber of Commerce & Industry
Athens, Greece**

June 28-29, 2012

Thursday June 28, 2012

9:00-9:30 AM

Welcome Remarks

Auditorium

Mr. Constantinos Michalos

President of Athens
Chamber of Commerce &
Industry (**ACCI**)

Dr. Dennis Koutras

Chairman, IFNA World
Congress 2012

“Analysis and Modeling of Economics”



Invited Session: Auditorium

Date: June 28, 2012

Time: 9:30-3:15 PM

Organizer & Chair: **Michael Kotarinos**

Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: mkotarinos@mail.usf.edu

9:30-10:05 AM

Optimal Control of Renewable Resource Exploitation Models under Weak Regulatory Constraints

Fabio Lamantia, Department of Business Administration, University of Calabria, Italy

Email: lamantia@unical.it

10:05-10:40 AM

A Dynamic Model of Two Species Fishery with Adaptive Switching of Fishing Strategies

Davide Radi, Lorenzo Mascheroni Department of Mathematics and Statistics, University of Bergamo, Italy-

Email: David.radi@unibg.it

10:40- 11:15 PM

A Group Theoretical Approach and Geometric Algebra of Pasinetti-Monetary Theory of Production

H.A. Nour. Eldin with H. Bortis and J. F. Emmenegger, University of Wuppertal (DE) and University of Freiburg (CH)

Email: eldin@uni-wuppertal.de and Jean-francois.emmenegger@unifr.ch

11:15-11:30 AM

Break

11:30- 12:05 PM

A Finite-Dimensional Quantum Model for the Stock Market

Liviu Adrian Cotfas, Faculty of Economic Cybernetics, Statistics and Informatics, Academy of Economic Studies, Bucharest, Romania

Email: lcotfas@gmail.com

12:05- 12:40PM

Human Capital Formation in an Oil-Based Economy: The Case of Trinidad and Tobago

Linda Hewitt, Centre for Interdisciplinary Research and Development, Trinidad and Tobago

Email: linhew@trinidad.net

“Analysis and Modeling of Economics” (cont.)



Invited Session: Lecture Hall A

Date: June 29, 2012

Time: 9:00-4:55 PM

Organizer & Chair: **Michael Kotarinos**

Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA

Email: mkotarinos@mail.usf.edu

9:00-9:35 AM

Comparative Health-Education Output and Economic Growth in Nigeria

Timothy Olatayo, Olabisi Onabanjo University, Nigeria

Email: otimtoy@yahoo.com

9:35-10:10 AM

Toward a High Quality of Life in the Mature Society: Beyond GDP

Iyoda Mitsuhiro, Momoyama Gakuin (St. Andrew's) University, Osaka

Email: m-iyoda@andrew.ac.jp

10:10-10:45 AM

Comprehensive Financial Planning: Strategic Budgeting

Vladimir Savchuk, Professor, Dept. of Finance, International Institute of Business, Ukraine

Email: vps@a-teleport.com

10:45-11:00 AM

Break

11:00-11:35 AM

Role of Derivatives in the Global Crisis and Possible Remedies

Nilakantan Narasinghallur, Associate Professor, KJ Somalya Inst. Of Management Studies and Research

Email: nilakantan@simsr.somalya.edu

11:35: 12:10 PM

Hedging in Incomplete Market with Default: Difference Points of View

Paola Tardelli, Department of Electrical and Information Engineering, University of L'Aquila, Italy

Email: paola.tardelli@univaq.it

12:10-12:45 PM

A Model of Waste Control, Abatement Investment and Welfare

E. Saltari, Università di Urbino, Faculty of Economics, Urbino, Italy

Email: enrico.saltari@uniroma1.it

12:45:1:20 PM

Nonlinear Dynamics and Indeterminacy in an OLG Growth Model with Environment

M. Sodini, Dipartimento di Economia Impresa e Regolamentazione, Università di Sassari, Via Torre Tonda 34, 07100 Sassari, Italy

1:20-2:20 PM

Lunch

2:20-2:55 PM

Environmental Benefits for Indo-Pakistan Trade Growth

Ashwani K. Pradhan, Professor of Finance, K.J. Somaiya Institute of Management Studies and Research, Vidyanagar, Mumbai, India

Email: akpradhansimsr.somalya.edu

2:55-3:30 PM

Misleading Evaluation of Investment Strategies

Sherlene Enriquez-Savery, University of South Florida, Florida, USA

Email: ssenriqu@mail.usf.edu

3:30-3:45 PM

Break

3:45-4:20 PM

An Aging Society with the Declining Birthrate: Japan (Towards a Sustainable Society)

Iyoda Mitsuhiro, Momoyama Gakuin (St. Andrew's) University, Osaka

Email: m-iyoda@andrew.ac.jp

4:20-4:55PM

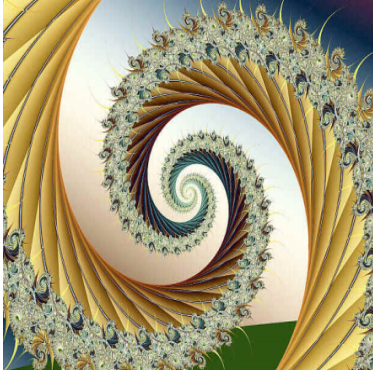
Economic Applications of Time Series Forecasting of Government Health Expenditures

Michael Kotarinos, Department of Mathematics and Statistics, University of South Florida, USA

Email: mkotarin@mail.usf.edu

GLOBAL ECONOMY

ROUND TABLE DISCUSSION AT ACCI
TO BE ANOUNCED



MATHEMATICAL SCIENCES

**International Federation of Nonlinear Analyst
IFNA**

**Department of Mathematics, The National and
Kapodistrian**

University of Athens, Greece.

June 25-29, 2012

OPENING CEREMONY

Monday June 25, 2012

9:00-10:00 AM

Amphitheatre/K. Karatheodori

Welcome Remarks

Dr. Chris P. Tsokos

President of IFNA

Dr. Grigoris Kalogeropoulos

President of Greek Mathematics Society

KEYNOTE SPEAKER

Amphitheatre/K. Karatheodori

10:00-11:00 AM

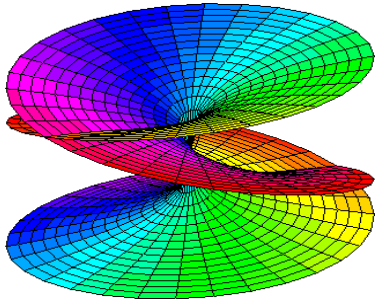
The Use of Algebraic Geometry in Feedback Control Problem

Dr. Grigoris Kalogeropoulos

Professor and Chair of Mathematics, University of Athens

Email: gkaloger@math.uoa.gr

“Nonlinear Problems on Riemann Surfaces”



Organizer & Chair: **Makoto Masumoto**
Professor, Yamaguchi University, Japan
masumoto@yamaguchi-u.ac.jp

Session I: $\Gamma 22$
Date: June 25, 2012
Time: 11:00-7:00 PM

11:00-11:35 AM

Solution Formula of Stokes Operator with Stress Free Boundary Conditions

Yasushi Hataya, Professor, Yamaguchi University, Japan

Email: hataya@yamaguchi-u.ac.jp

11:35-12:10 PM

Invariants for the k th-Order Lyness Max Equation

Masaaki Ito, Associate Professor, Hiroshima University, Japan

Email: ito@amath.hiroshima-u.ac.jp

12:10-12:30 PM

Break

12:30-1:05 PM

Locus of Extremal Riemann Surfaces of Genus Two

Gou Nakamura, Associate Professor, Aichi Institute of Technology, Japan

Email: gou@aitech.ac.jp

1:05-1:40 PM

Douglas' Factorization Theorem and RKHS

Akira Yamada, Professor, Tokyo Gakugei University, Japan

Email: yamada@u-gakugei.ac.jp

1:40-2:40 PM

Lunch

2:40-3:15 PM

Handle Conditions and Basic Extremal Lengths of Marked Once-Holed Tori

Makoto Masumoto, Professor, Yamaguchi University, Japan

Email: masumoto@yamaguchi-u.ac.jp

3:15-3:50 PM

Conditional External Distance Between Sets of Points

Tonkov Tonko, Associate Professor Retired, University of Mining and Geology, Bulgaria
Email: tonkov@mgu.bg

3:50-4:25 PM

Mappings with Bounded Distortion and Non-Trivial Hyperbolic 4-Cobordisms

Boris Apanasov, Professor, University of Oklahoma, USA
Email: apanasov@ou.edu

4:25-5:00 PM

Complexity Theory: What is it and the P-NP Problem

Arka Bhattacharya, National Institute of Technology, Trichy, India
Email: arkadtps@gmail.com

5:00-5:15 PM

Break

5:15-5:50 PM

Pluripotential Theory and Rational Approximation

Azimbay Sadullaev, Professor, National University of Uzbekistan, Uzbekistan
Email: sadullaev@mail.ru

5:50-6:25 PM

Higher Order Sliding Modes on Stables Manifolds

Metin Salamci, Professor, Gazi University, Turkey
Email: msalamci@gazi.edu.tr

6:25-7:00 PM

Nonlinear Dispersive Equations Associated with the Motion of Curves in R^3

Nikos Karachalios, Professor, University of Aegean, Greece
Email: karan@aegean.gr

"Mathematical Sciences"



Chair: **Panagiotis Vassiliou**

Professor, Aristotle University of Thessaloniki, Greece

Email: vassiliou@math.auth.gr

Session II: Γ21
Date: June 25, 2012
Time: 11:00-1:40 PM

11:00-11:35 AM

Singularly Impulsive Dynamical Systems with Time Delay: Bellman-Gronwall Lemma

¹Natasa Kablar and ²Vladimir Kvrđić, Research Scientist, Lola Institute, Serbia

Email: nkablar@sezampro.rs, vladimir.kvrgic@li.rs

11:35-12:10 PM

Singularly Impulsive Dynamical Model with Time Delay: Lyapunov-Krasovskii and Razumikhin Stability Results

¹Natasa Kablar and ²Vladimir Kvrđić, Research Scientist, Lola Institute, Serbia

Email: nkablar@sezampro.rs, vladimir.kvrgic@li.rs

12:10-12:30 PM

Break

12:30-1:05 PM

On the General Lienard Polynomial Equation

Valery Gaiko, Leading Researcher, National Academy of Sciences of Belarus, Belarus

Email: valery.gaiko@yahoo.com

1:05-1:40 PM

Generalized Differential Operators on Rings and their Applications

Asma Ali, Associate Professor, Aligarh Muslim University, India

Email: asma_ali2@reddiffmail.com

1:40-2:40 PM

Lunch

Chair: Dr. M. Sambandham
Professor, Morehouse College, USA
Email: msamband@morehouse.edu

Session II: Γ21
Date: June 25, 2012
Time: 2:40-7:00 PM

2:40-3:15 PM

Coherent Detection of OFDM Signals

Kasturi Vasudevan, IIT, Kanpur, India.

Email: vasu@iitk.ac.in

3:15-3:50 PM

Mathematical Model of Singularly Impulsive Dynamical Systems with Time Delay

¹Natasa Kablar and ²Vladimir Kvrđić, Research Scientist, Lola Institute, Serbia

Email: [¹nkablar@sezampro.rs](mailto:nkablar@sezampro.rs), [²vladimir.kvrgic@li.rs](mailto:vladimir.kvrgic@li.rs)

3:50-4:25 PM

Recent Developments in Global Variational Analysis

Demeter Krupka

Professor, Beijing Institute of Technology, Beijing / La Trobe University, Melbourne, Australia / University of Ostrava, Ostrava, Czech

Email: krupka@physics.muni.cz

4:25-5:00 PM

Second Order Variational Sequences and Parameter-Invariant Variational Problems

Urban Zbynek, Assistant Professor, University of Pardubice, Czech

Email: urbanzp@gmail.com

5:00-5:15 PM

Break

5:15-5:50 PM

Mathematical Model of NFkB Regulatory Model

¹Natasa Kablar and ²Vladimir Kvrđić, Research Scientist, Lola Institute, Serbia

Email: [¹nkablar@sezampro.rs](mailto:nkablar@sezampro.rs), [²vladimir.kvrgic@li.rs](mailto:vladimir.kvrgic@li.rs)

5:50-6:25 PM

Computation and Visualization of Localized Solutions to Multidimensional Nonlinear Evolution Partial Differential Equations

Milivoj R. Belic, Professor, Science Program, Texas A&M University at Qatar, USA

Email: milivoj.belic@qatar.tamu.edu

6:25-7:00 PM

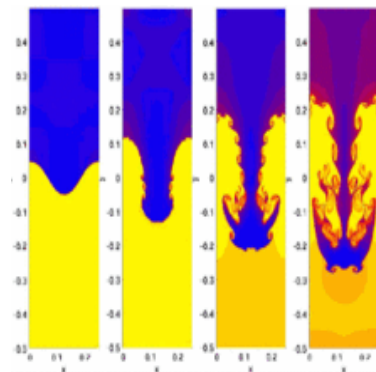
On the Real Zeros of Random Polynomials

M. Sambandham, Professor, Morehouse College, USA

Email: msamband@morehouse.edu

KEYNOTE SPEAKER**Amphitheatre/K. Karatheodori****9:00-10:00 AM***Interaction between Mathematics and Other Fields of Science***Dr. Constantin Corduneanu**

Emeritus Professor, University of Texas at Arlington

Email: cordun@exchange.uta.edu**“Applied Mathematics”**

Organizer & Chair:

¹**Dr. Constantin Corduneanu** and ²**Dr. Liu Chaoqun**¹Emeritus Professor, University of Texas at ArlingtonEmail: cordun@exchange.uta.edu²Professor, University of Texas at Arlington, USAEmail: cliu@uta.edu**Session I: $\Gamma 21$** **Date: June 26, 2012****Time: 10:00-7:25 PM****10:00-10:35 AM***Almost Periodic Solutions of a Wazewska-Lasota's Model***Yoshihiro Hamaya**, Dean-Professor, Okayama University of Science, JapanEmail: hamaya@mis.ous.ac.jp**10:35-11:10 AM***A Globally Convergent Method for an Inverse Problem of Diffusive Optical Tomography and its Experimental Applications***J. Su**, Professor and Chair, University of Texas at Arlington, USAEmail: hamaya@mis.ous.ac.jp**11:10-11:30 AM****Break****11:30-12:05 PM***New Theory on Turbulence Generation and Sustainance by Direct Numerical Simulation***Liu Chaoqun**, Professor, University of Texas at Arlington, USAEmail: cliu@uta.edu

12:05-12:40 PM

Galoisian Approach to Susy QM and Beyond

Primitivo Acosta-Humanez, Professor, Universidad del Norte, Barranquilla, Colombia

Email: pacostahumanez@uninirte.edu.co

12:40-1:15 PM

A Generalization of a Dual Theorem of Hardy and Littlewood over Bounded Circular Domain

Maher Marzuq, Associate Professor, School of Natural Engineering and Management, German Jordanian University, Jordan

Email: mather_marzuq@yahoo.com

1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christopher J. Logothetis)

3:15-4:15 PM

Keynote Speaker (Dr. Nancy Geller)

4:15-4:30 PM

Break

4:30-5:05 PM

Multivalued Poincare-Maps for Systems with Hysteresis

Rudolf Csikja, Budapest University of Technology and Economics, Hungary

Email: csikja@math.bme.hu

5:05-5:40 PM

Formal Trigonometric Series and Generalized Oscillatory Functions

Constantin Corduneanu, Emeritus Professor, University of Texas at Arlington, USA

Email: concord@uta.edu

5:40-6:15 PM

Modeling of Nonlinear Crucial Features of Geometry of Pin Joints

Andrzej Kolodziej, Technical Faculty, Higher Vocational State School in Kalisz, Poland

Email: a.kolodziej@ip.pwsz.kalisz.pl

6:15-6:50 PM

Elastica Related Lagrangians and Extremal Curves

Oscar J. Garay, Professor, Universidad Del Pais Vasco, Spain

Email: oscar.garay@ehu.es

6:50-7:25 PM

Semi Equivelar Maps and D-Covered Triangulations

Ashish Upadhyay, Assistant Professor, Indian Institute of Technology Patna, India

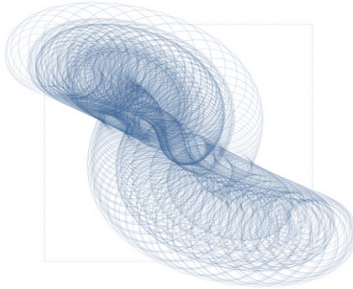
Email: upadhyay@iitp.ac.in

“Problems and Methods of Modeling and Analysis in Complex Multidisciplinary Systems Dynamics”

Session II: Γ22

Date: June 26, 2012

Time: 10:00-6:15 PM



Organizer & Chair:

¹**Dr. L. K. Kuzmina** and ²**Dr. Ioannis Antoniou**

¹KAI – KNRTU of A.N. Tupolev name, IFNA-ANS, Kazan, Russia

lyudmild.kuzmina@ksu.ru

²Aristotle University, Thessaloniki, Greece

iantonio@math.auth.gr

Dedicated to

120th Anniversary of “Stability theory of A.M. Lyapunov”
and to Memory of Great, Brilliant Scientists:

N.G.Chetayev (110 years)

I.R.Prigogine,

NOBEL LAUREATE (95 years); V.M.Matrosov (80 years)

10:00-10:35 AM

On the Origin of the Moon

Emilio Spedicato, Professor, University of Bergamo in Italy, Italy

Email: emilio@ibguniv.unibg.it

10:35-11:10 AM

Galaxycentric Paradigm in Selenology Problems

A.A. Barenbaum, M.I. Shpekin, Professor, Oil and Gas Research Institute RAS and Kazan University, Russia

Email: azary@mail.ru

11:10-11:30 AM

Break

11:30-12:05 PM

Geosoliton Degassing of Earth: Concept and Problems

R.M. Bembel, V. M. Megherva, Russia

12:05-12:40 PM

Transonic Flows: Stability Problems and Modeling

F.A. Slobodkina, Russia

12:40-1:15 PM

A.M. Lyapunov Stability Theory in General Modeling and Analysis Problems for Complex Systems Dynamics

L.K. Kuzmina, Professor, Kazan State University, Russia

Email: lyudmild.kuzmina@ksu.ru

1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christopher J. Logothetis)

3:15-4:15 PM

Keynote Speaker (Dr. Nancy Geller)

4:15-4:30 PM

Break

4:30-5:05 PM

Methodical Aspects of Modeling Mechanical Space Systems Dynamics

A.P. Alpatov, Russia

5:05-5:40 PM

Robust Identification of Multivariable Regression Models

Vojislav Filipovic, Serbia

Email: vfilip@eunet.yu

5:40-6:15 PM

A Non Local Technique to Approach the Solution of Nonlinear Boundary Value Problems Applied to a Supersonic Flow Model

Ricardo T. Ferreyra, Professor, Universidad Nacional de Cordoba, Argentina

Email: rferrey@efn.uncor.edu

"Mathematical Sciences" (cont)



Session III: $\Gamma 23$

Date: June 26, 2012

Time: 10:00-1:15 PM

Chair: **Q-Heung Choi**, Professor, Inha University, Incheon, South Korea

Email: qheung@inha.ac.kr

Doo Young Kim, University of South Florida, USA

Email: dooyoungkim@mail.usf.edu

10:00-10:35 AM

Hamiltonian System and Reduction Method

Tacksun Jung, Professor, Kunsan National University, Kunsan, South Korea

Email: tsjung@kunsan.ac.kr

10:35-11:10 AM

The Parabolic Problem with Asymptotical Linearity

Q-Heung Choi, Professor, Inha University, Incheon, South Korea

Email: qheung@inha.ac.kr

11:10-11:30 AM

Break

11:30-12:05 PM

Resisting Knowledge Realization Momentum – The Secret and the Scope of Non-Linear Discovery

Gideon Samid, Professor, Chief Technology Officer BitMint Ltd. Bit Wise Money, Israel

Email: gideon@bitmint.com

12:05-12:40 PM

Convex Optimization, Fuzzy Optimization and Interval Optimization

Geetanjali Panda, Professor, India

Email: geetanjali@maths.ilitkgp.ernet.in

12:40-1:15 PM

Farkas' Lemma, Gale's Theorem, and Linear Programming: the Infinite Case in an Algebraic Way

David Bartl, Assistant Professor, University of Ostrava, Czech Republic

Email: bartl@osu.cz

Poster Presentation

Picone Identities and Oscillation Theory for Quasi-Linear Elliptic Equations with $P(x)$ -Laplacians

Norio Yoshida, Professor, University of Toyama, Japan

Email: nori@sci.u-toyama.ac.jp

1:15-2:15 PM	Lunch
2:15-3:15 PM	Keynote Speaker (Dr. Christopher J. Logothetis)
3:15-4:15 PM	Keynote Speaker (Dr. Nancy Geller)
4:15-4:30 PM	Break

Session III: Γ23
Date: June 26, 2012
Time: 4:30-6:50 PM

Chair: **Tacksun Jung**, Professor, Kunsan National University, Kunsan, South Korea
 Email: tsjung@kunsan.ac.kr

4:30-5:05 PM
The Stability of Mathematical Models of Immunology
Ilya Boykov, Professor, Penza State University, Russia
 Email: boikov@pnzgu.ru

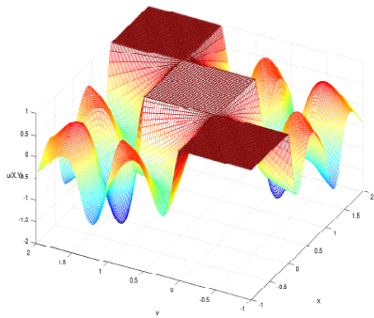
5:05-5:40 PM
New Approach to the Solution of Optimal Stopping Problem
Ernst Presman, Professor, Central Economics and Mathematics Institute, Russia
 Email: presman@cemi.rssi.ru

5:40-6:15 PM
Some New Developments for Numeric Solutions of Singularly Perturbed Problems
Vivek Aggarwal, Assistant Professor, Delhi Technological University, India
 Email: vivekkumar.ag@gmail.com

6:15-6:50 PM
On Neumann Boundary Problems with Variable Exponents
Yun-Ho Kim, Professor, Sangmyung University, South Korea
 Email: kyh1213@smu.ac.kr

KEYNOTE SPEAKER**Amphitheatre/K. Karatheodori****9:00-10:00 AM***Soliton Equations, Variational Identities and Hamiltonian Formulations***Wen-Xiu Ma**

Professor, University of South Florida, USA

mawx@cas.usf.edu**“Soliton Theory, Integrable Systems and Applications”**Organizer & Chair: ¹Wen-Xiu Ma and ²Chunxia Li¹Professor, University of South Florida, USAmawx@cas.usf.edu²Professor, Capital Normal University, PR Chinatrisha_li2001@yahoo.com**Session I: Γ 23****Date: June 27, 2012****Time: 10:00-7:00 PM****10:00-10:35 AM***Pfaffian Solution in (3+1)-Dimensions***Magdy G. Asaad**, Assistant Professor, Alexandria University, EgyptEmail: mgamil@mail.usf.edu**10:35-11:10 AM***Approximate Analytical Solutions of Fractional Gas Dynamic Equations***Subir Das**, Professor, Institute of Technology, IndiaEmail: subir_das08@hotmail.com**11:10-11:30 AM****Break****11:30-12:05 PM***Conservation Laws of Equation Family with Same Kac-Moody Virasoro Symmetry***Senyue Lou**, Professor, Shanghai Jiaotong University and Ningbo University, PR ChinaEmail: lousenyue@nbu.edu.cn

12:05-12:40 PM

Multicomponent Solitons and Fascinating Energy Sharing Collisions

T. Kanna, Professor, Bishop Heber College, India

Email: kanna_phy@bhc.edu.in

12:40-1:15 PM

Coupled KdV Equations and their Explicit Solutions through Two-Dimensional Hamiltonian System with a Quartic Potential

Jianli Cao, Professor, Henan University of Technology, PR China

Email: cao_j_l@163.com

1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christos Evangeliou)

3:15-3:50 PM

Bosonizations of the Superalgebra $U_q(\hat{sl}(N|1))$ and $U_{q,p}(\hat{sl}(N|1))$ for an Arbitrary Level

Takeo Kojima, Professor, Yamagata University, Japan

Email: kojima@yz.yamagata-u.ac.jp

3:50-4:25 PM

Group-Invariant Solutions of an Integrable Coupled System

Suping Qian, Professor, Changshu Institute of Technology, PR China

Email: qsp@cslg.edu.cn

4:25-5:00 PM

Soliton Solution as Inverse Problem for Coefficient Identification

Rossitza S. Marinova, Professor, Concordia University College of Alberta, Canada

Email: rmarinova@gmail.com

5:00-5:15 PM

Break

5:15-5:50 PM

Exact Solutions of (2+1)-Dimensional HNLS Equation

Ji Lin and Xiaoyan Tang, Professor, Zhejiang Normal University, PR China

Email: linji@zhjnu.edu.cn

5:50-6:25 PM

Modified Projective Synchronization of a New Hyperchaotic System via Nonlinear Control

Xin Li, Professor, Changshu Institute of Technology, PR China

Email: lovelixin0412@163.com

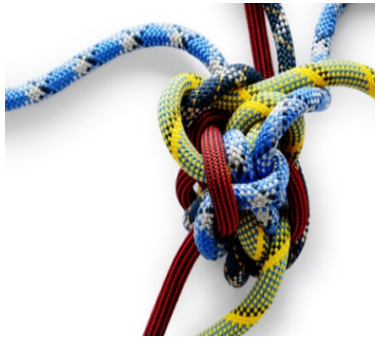
6:25-7:00 PM

Exact Travelling Wave Solutions of the Generalized Bretherton Equation

Canan UNLU, Istanbul University, Istanbul, Turkey

Email: unlucanan@hotmail.com

“Problems and Methods of Modeling and Analysis in Complex Multidisciplinary Systems Dynamics”



Session II: Γ22
Date: June 27, 2012
Time: 10:00-5:00 PM

Organizer & Chair:

¹**Dr. L. K. Kuzmina** and ²**Dr. Ioannis Antoniou**

¹KAI – KNRTU of A.N. Tupolev name, IFNA-ANS, Kazan, Russia

Email: lyudmild.kuzmina@ksu.ru

²Aristotle University, Thessaloniki, Greece

Email: iantonio@math.auth.gr

10:00-10:35 AM

Cryptography with Entropy Producing Maps

G. Makris, Aristotle University of Thessaloniki, Greece

Email: geormak@gmail.com

10:35-11:10 AM

Markov Dynamics of Ecological Models with Dispersion and Competition

Jurij Kozicki, Poland

Email: Jezy.kozicki@umch.lublin.pl

11:10-11:30 AM

Break

11:30-12:05 PM

From Irreversibility to Complex Systems Analysis

Ioannis Antoniou, Greece

Email: iantonio@math.auth.gr

12:05-12:40 PM

On a K-Dimensional Nonlocal Boundary Value Problem at Resonance

Katarzyna Szymanska-Debowska, Professor, Technical University of Lodz, Poland

Email: katarzyna.szymanska-debowska@p.lodz.pl

12:40-1:15 PM

Evolutionary Algorithms and Eco-Informatics: A Myth or Reality

Osei, Bonsu M., Associate Professor, Eastern Connecticut State University, USA

Email: oseib@easternct.edu

1:15-2:15 PM

Lunch

2:15-3:15 PM

Keynote Speaker (Dr. Christos Evangeliou)

3:15-3:30 PM

Break

“IFNA: Education and Development in Ghana”

Organizer & Chair: **Osei, Bonsu M.**

Associate Professor, Eastern Connecticut State University, USA

Email: oseib@easternct.edu

Session II: Γ22

Date: June 27, 2012

Time: 3:30-5:15 PM

3:30-4:05 PM

Contemporary Issues in Tertiary Education in Ghana

Samuel Asiedu-Addo, Professor, University of Education, Winneba, Ghana

Email: samasiedeuaddo@yahoo.com

4:05-4:40 PM

Education and Development in Ghana: The Role of Distance Education

Isaac K. Dontwi, Professor, Kwame Nkrumah University of Science and Technology, Ghana

Email: ikedontwi@hotmail.com

4:40-5:15 PM

Modeling Students Affinity for Pure mathematics using Differential Equations: The Case of Students of Kwame Nkrumah, University of Science and Technology

William Obeng-Denteh, Lecturer, Kwame Nkrumah University of Science and Technology, Ghana

Email: obengdentehw@yahoo.com

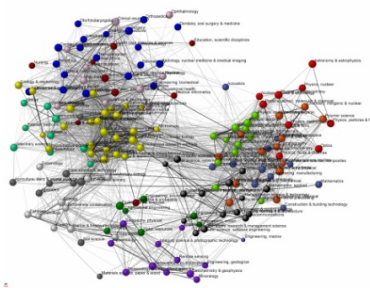


INDUSTRY

International Federation of Nonlinear Analysts
IFNA

Department of Mathematics, The National and Kapodistrian
University of Athens, Greece.
June 27, 2012

“Industry: Engineering, Physics & Chemistry”



Session III: Γ24

Date: June 27, 2012

Time: 10:00-1:15 PM

Chair: **Marian Dudziak**, Chair of Basics of Machine Design Organization,
Poznan University of Technology, Poland

Email: Marian.dudziak@put.poznan.pl

10:00 -10:35 AM

Effect of Non- Zero Basic State Velocity on Spatial Instability of Electrically Forced

Syantana Das, Material Science Engineering Organization/ Institution, Texas State, Columbia

Email: S_d65@txstate.edu

10:35 -11:10 AM

Influence of Nonlinear Features of Material on Properties of Timing Belt

Prof. Marian Dudziak, Chair of Basics of Machine Design Organization, Poznan University of Technology,
Poland.

Email: Marian.dudziak@put.poznan.pl

11:10-11:30 AM

Break

11:30-12:05 PM

The Orthotropic Coefficients in Modeling the Process of Plastification Anisotropic Material

Krzysztof Talaska, Chair Of Basics of Machine Design Organization, Poznan University of Technology,
Poland.

Email: Krzysztof.talaska@put.poznan.pl

12:05-12:40 PM

Cuckoo Search Algorithm for Global Optimization Parameter Adjustment

Milan Tuba, Professor, Provost for Mathematical and Technical Sciences, University Megatrend Belgrade,
Faculty of Computer Science, Belgrade, Serbia

Email: tuba@matf.bg.ac.rs

12:40-1:15 PM

A Web Based Face Counter Prediction System from Only Fingerprints

Seref Sagioglu, Professor, Gazi University, Turkey

Email: ss@gazi.edu.tr

1:15-2:15 PM

Lunch

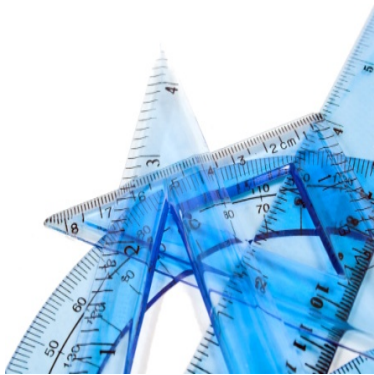
2:15-3:15 PM

Keynote Speaker (Dr. Christos Evangeliou)

3:15-3:30 PM

Break

“Topics in Environmental Engineering”



Session III: Γ24

Date: June 27, 2012

Time: 3:30-5:50 PM

Organizers & Chairs: **Mohamed Elhakeem and Thanos Papanicolaou**

Email: mohamed.elhakeem@adu.ac.ae

Email: apapanic@engineering.uiowa.edu

Professor & Donald E. Bently Faculty Fellow of Engineering

Department of Civil and Environmental Engineering and IIHR - Hydrosience &

Engineering Secondary appointment: Iowa Public Policy Center

The University of Iowa

3:30-4:05 PM

Scour Around a Barb in a Gravel-Bed Stream: Effects of Submergence

Thanos Papanicolaou, Professor & Donald E. Bently Faculty Fellow of Engineering

Dept. of Civil and Environmental Engineering and IIHR - Hydrosience & Engineering

Secondary appointment: Iowa Public Policy Center

The University of Iowa

Email: apapanic@engineering.uiowa.edu

4:05-4:40 PM

Grain Size Effect on Bed Forms in Meandering Channel

M. Elzeldin, M. D., Bui, T. El Tahawy, and P. Rutschmann, Technische Universität München, Bayern, Germany

Email: m.eizeldin@bv.tum.de

4:40-5:15 PM

Modeling of Abu Dhabi Shore Protection

Mohamed Elhakeem, Ph.D., P.E. and Ahmad Dibajah, Assistant Professor, Department of Civil Engineering, College of Engineering and Computer Science, Abu Dhabi University, UAE

Email: Mohamed.Elhakeem@adu.ac.ae

5:15-5:50 PM

Prediction of Saturated Hydraulic Conductivity Dynamics in a Midwestern Agriculture Watershed, Iowa

Mohamed Elhakeem, Ph.D., P.E., Christopher Wilson, Thanos Papanicolaou and Yi-Jia Chang, Assistant Professor, Department of Civil Engineering, College of Engineering and Computer Science
Abu Dhabi University, UAE

Email: Mohamed.Elhakeem@adu.ac.ae

KEYNOTE SPEAKER

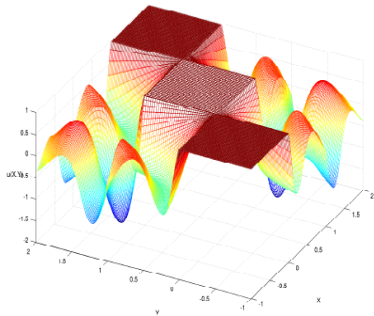
Amphitheatre/K. Karatheodori

9:00-10:00 AM

Trigonometric Collocation for Nonlinear Riemann-Hilbert Problems on Doubly Connected Domains

Wolfgang L. Wendland, Professor, University of Stuttgart, Germany
Email: wendland@mathematik.uni-stuttgart.de

“Soliton Theory, Integrable Systems and Applications” (cont.)



Organizer & Chair: ¹Wen-Xiu Ma and ²Chunxia Li
¹Professor, University of South Florida, USA
Email: mawx@cas.usf.edu
²Professor, Capital Normal University, PR China
Email: trisha_li2001@yahoo.com

Session I: Γ23
Date: June 28, 2012
Time: 10:00-6:35 PM

10:00-10:35 AM

Recursion Operators for Dispersionless Integrable Systems in any Dimension

Artur Sergyeyev, Professor, Silesian University in Opava, Czech Republic
Email: artur.sergyeyev@math.slu.cz

10:35-11:10 AM

The Application of Pfaffian to Nonlinear Evolution Equations

Junxiao Zhao, Professor, Graduate University of Chinese Academy of Sciences, PR China
Email: jxzhao@gucas.ac.cn

11:10-11:30 AM

Break

11:30-12:05 PM

Integrable Rosochatius Deformations of the Restricted Soliton Flows

Ruguang Zhou, Professor, Xuzhou Normal University, PR China
Email: rgzhou@public.xz.js.cn

12:05-12:40 PM

Application of the Hamiltonian Approach to Nonlinear Oscillators with Rational and Irrational Elastic Terms

Ahmet Yildirim, Professor, Ege University, Turkey

Email: ahmetyildirim80@gmail.com

12:40-1:15 PM

Symmetries and Algebras of A (2+1)-Dimensional MKdV-Type System

Jun Yu, Professor, Shaoxing University, PR China

Email: junyu@zscas.edu.cn

1:15-2:15 PM

Lunch

2:15-2:50 PM

Conservation Laws of Several (2+1)-Dimensional Differential-Difference Hierarchies

Zuonong Zhu, Professor, Shanghai Jiaotong University, PR China

Email: znzhu2@yahoo.com.cn

2:50-3:25 PM

ADHM Construction of Noncommutative Instantons

Massashi Hamanaka, Professor, Nagoya University, Japan

Email: hamanaka@math.nagoya-u.ac.jp

3:25-4:00 PM

Peakon-Antipeakon Interactions in the Degasperis-Procesi Equation

Lingjun Zhou, Professor, Tongji University, PR China

Email: zhoulj@tongji.edu.cn

4:00-4:15 PM

Break

4:15-4:50 PM

Generalized Bilinear Equations with Linear Subspaces of Solutions

Wen-Xiu Ma, Professor, University of South Florida, USA

Email: mawx@cas.usf.edu

4:50-5:25 PM

Darboux Transformations for a Twisted Derivation and Quasideterminant Solutions to the Super KdV Equation

Chunxia Li, Professor, Capital Normal University, PR China

Email: trisha_li2001@yahoo.com

5:25-6:00 PM

Painlevé Analysis and Exact Solutions of the Resonant Davey Stewartson System

Xiaoyan Tang, Professor, Shanghai Jiaotong University, PR China

Email: xytang@sjtu.edu.cn

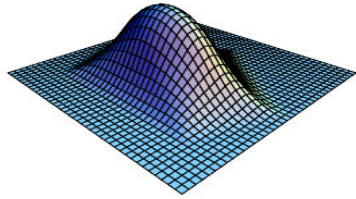
6:00-6:35 PM

Exact and Numerical Solutions to the Cauchy Problem

Syed Tauseef Mohyud-Din, Professor, HITEC University, Pakistan

Email: syedtauseefs@hotmail.com

“On the Theory of Approximation and Application”



Organizer & Chair: **Arthur Danielyan**
 Professor, University of South Florida, USA
 Email: adaniely@usf.edu

Session II: $\Gamma 21$
 Date: June 28, 2012
 Time: 10:00-4:35 PM

10:00-10:50 AM

Approximating the Riemann Zeta-Function by Strongly Recurrent Functions

P.M. Gauthier, Professor, University of Montreal, Canada
 Email: Gauthier@DMS.UMontreal.ca

10:50-11:40 AM

From Universal Taylor Series to Universal Padé Approximants and Spherical Uniform Approximation

Vassili Nestoridis, Professor, University of Athens, Greece
 Email: vnestor@math.uoa.gr

11:40-11:55 AM

Break

11:55-12:45 PM

On Closed Sets of Approximation on Riemann Surfaces

Andre Boivin, Professor, University of Western Ontario, Canada
 Email: boivin@uwo.ca

12:45-1:35 PM

Some Extremal Problems on Conformal Invariants with Origins in Polynomial Approximation

Alexander Solynin, Professor, Texas Tech University, USA
 Email: alex.solynin@ttu.edu

1:35-2:35 PM

Lunch

2:35-3:10 PM

On a Characterization of Arakelian Sets

Grigorios Fournodavlos, University of Toronto, Canada
 Email: grifour@math.toronto.edu

3:10-4:00 PM

A New Universal Approximation Method and Applications

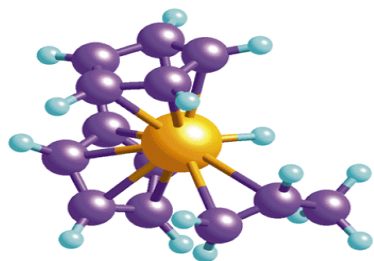
Arthur Danielyan, Professor, University of South Florida, USA
 Email: adaniely@usf.edu

4:00-4:35 PM

Power Series with H.-O. Gaps; Tauberian Theorems

Tatevik Gharibyan, Professor, Institute of Mathematics, Armenia
 Email: gtatev@instmath.sci.am

“Chemistry: From Molecules and Materials to Application”



Session III: Γ22
Date: June 28, 2012
Time: 10:00-3:25 PM

Organizer & Chair:

Dr. Constantinos J. Milios & Prof. Dr. Spyros P. Perlepe

Chemistry Department, University of Crete & University of Patras

Email: komil@chemistry.uoc.gr

10:00-10:35 AM

Using Lanthanide Ions to Improve the Properties of Single-Molecule Magnets

Spyros P. Perlepes, Professor, Chemistry Department, University of Patras

Email: perlepes@patreas.upatras.gr

10:35-11:10 AM

New Materials for Energy Related Technologies

John Kallitsis, Professor, Chemistry Department, University of Patras

Email: kallitsi@upatras.gr

11:10-11:30 AM

Break

11:30-12:05 PM

Untangling "Gordian Knots" in industrial waters

Konstantinos D. Demadis, Professor, Chemistry Department, University of Crete

Email: demadis@chemistry.uoc.gr

12:05-12:40 PM

Design and Synthesis of Advanced Nanoporous materials for Energy and Environmental Related Applications

Pantelis Trikalitis, Professor, Chemistry Department, University of Crete

Email: ptrikal@chemistry.uoc.gr

12:40-1:15 PM

Metal-Organic Frameworks: Synthetic Strategies and Applications

Giannis S. Papaefstathiou, Professor, Chemistry Department, University of Athens

Email: gspapaef@chem.uoa.gr

1:15-2:15 PM

Lunch

2:15-2:50 PM

Luminescent Lanthanide Complexes and their Applications in Biological Imaging and Sensing

Thodoris Lazarides, Lecturer, Chemistry Department, University of Ioannina

Email: thlazar@cc.uoi.gr

2:50-3:25PM

Towards Hybrid Molecular Materials

Constantinos J. Milios, Professor, Chemistry Department, University of Crete

Email: komil@chemistry.uoc.gr

3:25-3:40 PM

Break

“Problems and Methods of Modeling and Analysis in Complex Multidisciplinary Systems Dynamics”



Session III: Γ22

Date: June 28, 2012

Time: 3:40-6:00 PM

Organizer & Chair:

¹**Dr. L. K. Kuzmina** and ²**Dr. Ioannis Antoniou**

¹KAI – KNRTU of A.N. Tupolev name, IFNA-ANS, Kazan, Russia

Email: lyudmild.kuzmina@ksu.ru

²Aristotle University, Thessaloniki, Greece

Email: iantonio@math.auth.gr

3:40-4:15 PM

I.R. Prigogine’s Contributions to Knowledge

Ioannis Antoniou, Professor, Aristotle University of Thessaloniki, Greece

Email: iantonio@math.auth.gr

4:15-4:50 PM

Vladimir Mefodyevich Matrosov

L.K. Kuzmina, Professor, Kazan State University, Russia

Email: lyudmild.kuzmina@ksu.ru

4:50-5:25 PM

Innovation and Internal Age of Bernoulli Processes

I. Gialamboukidis, Aristotle University of Thessaloniki, Greece

Email: heliassgj@yahoo.gr

5:25-6:00 PM

On the Nonautonomous Difference Equation $x_{n+1} = A_n + \frac{x_{n-1}^p}{x_n^q}$

C. J. Schinas, Assistant Professor, Democritus University of Thrace, Greece

Email: cschinas@ee.duth.gr

“Physics and its Applications”



Session IV: Γ24
Date: June 28, 2012
Time: 10:00-4:50 PM

Chair: **Dr. Panayiotis Stavrinos** and **Dr. Xenophon Moussas**
Professor, University of Athens, Greece

10:00-10:35 AM

The Geometry of Irreversibility

Ioannis Antoniou, Professor, Aristotle University of Thessaloniki, Greece

Email: iantonio@math.auth.gr

10:35-11:10 PM

Volume Evolutions in Finsler Space-Times

Kouretsis Alexandros, Professor, Physics Department, University of Thessaloniki, Greece

Email: akouretsis@astro.auth.gr

11:10-11:30 PM

Break

11:30-12:05 PM

Recent Results from the Study of Antikythera Mechanism: A Complex Astronomical Clock of the 2nd Century BC, Lunar Trajectory, Planetary Gear and Archimedes Signature

Xenophon Moussas, Professor, Physics Department, University of Athens, Greece

Email: xmoussas@phys.uoa.gr

12:05-12:40 PM

Similarity between a Newtonian and a Relativistic Problem of Astrophysical Relevance

Theocharis Apostolatos, Professor, Physics Department, University of Athens, Greece

Email: thapostol@phys.uoa.gr

12:40-1:15 PM

A Finite-Dimensional Quantum Model for the Stock Market

Cotfas Liviu-Adrian, Assistant Lecturer, Bucharest Academy of Economic Studies, Romania

Email: lcotfas@gmail.com

1:15-2:15 PM

Lunch

2:15-2:50 PM

Geometry of Systems of Differential Equations with Fractional Order Derivatives and its Applications to Dynamical Systems

Takahiro Yajima, Kobe University, Japan

Email: yajima@crystal.kobe-u.ac.jp

2:50-3:25 PM

Amenable C^ Algebras and Invariant Means*

Alex Myasnikov, Professor, Moscow Civil Engineering University, Russia

Email: arubus@yandex.ru

3:25-3:40 PM

Break

3:40-4:15 PM

Are Fractals Optimal Geometries for Diffusion

K. Karamanos, Professor, Physics Department, University of Athens, Greece

Email: kkaraman@ulb.ac.be

4:15-4:50 PM

Finslerian Structures in Space-Time and Cosmology

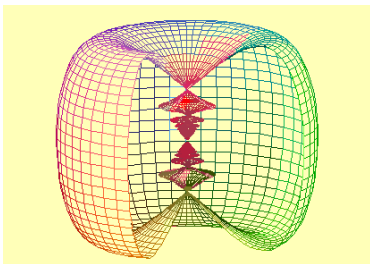
Panayiotis Stavrinou, Associate Professor, University of Athens, Greece

Email: pstavrin@math.uoa.gr

Friday

June 29, 2012

“Partial Differential Equations”



Organizer & Chair: **Netra Khanal**

Professor, the University of Tampa, Florida, USA

Email: nkhanal@ut.edu

Session III: $\Gamma 22$

Date: June 29, 2012

Time: 2:15-6:00 PM

2:15-2:50 PM

The Vlasov – Poisson Equations

A.L. Skubachevskii, Professor, People’s Friendship University of Russia, Russia

Email: skub@lector.ru

2:50-3:25 PM

Existence of the Solutions for the Singular Potential Elliptic System

Q-Heung Choi, Professor, Inha University, Incheon, South Korea

Email: qheung@inha.ac.kr

3:25-4:00 PM

On the Well-Posedness of KdV Equations

Mahendra Panthee, Professor, University of Minho, Braga, Portugal

Email: mpanthee@math.uminho.pt

4:00-4:15PM

Break

4:15-4:50 PM

Reduction Method for the Asymptotically Linear Hamiltonian System

Tacksun Jung, Professor, Kunsan National University, Kunsan, South Korea

Email: tsjung@kunsan.ac.kr

4:50-5:25 PM

Eigenvalues and Sets in the Range of Perturbed Sum of Two Maximal Monotone Operators

Dhruba Adhikari, Professor, Southern Polytechnic State University, Marietta, Georgia, USA

Email: dadhikar@spsu.edu

5:25-6:00 PM

A Study on Complex-Valued Solutions of Burgers and KdV-Burgers Equations

Netra Khanal, Professor, The University of Tampa, Florida, USA

Email: nkhanal@ut.edu



STATISTICAL SCIENCES

**International Federation of Nonlinear Analysts
 IFNA
 Department of Mathematics, the National and Kapodistrian
 University of Athens, Greece.
 June 29, 2012**

KEYNOTE SPEAKER

Amphitheatre/K. Karatheodori

9:00-10:00 AM

Resisting Knowledge Realization Momentum – The Secrete and the Scope of Non-Linear Discovery

“First International Prize of Innovation for 2011”

Prof. Gideon Samid

Computational Sciences, Chief Technology Officer BitMint Ltd: Bit Wise Money, Israel.
 Email: samidg@tx.technion.ac.il

KEYNOTE SPEAKER

Amphitheatre/K. Karatheodori

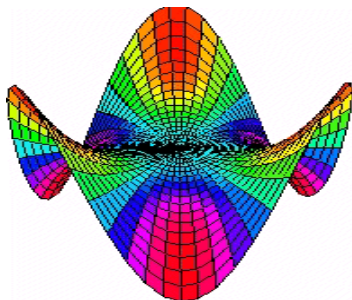
10:00-11:00 AM

Inferences on Generalized Extreme Value Distribution Based on Record Values

Dr. Mohammad Ahsanullah

Professor, Rider University, Lawrenceville, New Jersey, USA
 Email: ahsan@rider.edu

“Probability and Statistics”



Session I: Γ23

Date: June 29, 2012

Time: 11:00-4:25 PM

Organizer & Chair: **Gokarna R. Aryal**, Professor, Purdue University Calumet, IN, USA

Email: aryalg@purduecal.edu

11:00-11:35 AM

Efficient Empirical Estimation of the Sharpe Ratio Using its Minimum Unbiased Estimator and Bootstrap Resampling

Robin M. Antoine, Professor, University of West Indies, St Augustine, Trinidad and Tobago
Email: mmonteil@tstt.net.tt

11:35-12:10 AM

Fuzzy Semi Markov Migration Process in Credit Risk

P.-C.G. Vassiliou, Professor, Aristotle University of Thessaloniki, Greece
Email: vasiliou@math.auth.gr

12:10-12:30 AM

Break

12:30-1:05 PM

An alternative view of the Sharpe Ratio Using the Harmonic Mean

Ashok Sahai, Professor, University of West Indies, St Augustine, Trinidad and Tobago
Email: Shahi.ashok@gmail.com

1:05-1:40 PM

Missing Data in Statistical Analysis with Software Packages: A Comparative Test among SPSS, MINITAB and MATHEMATICA

Kyriaki Tsilika and George Halkos, Professor, University of Thessaly, Greece
Email: ktsilika@econ.uth.gr

1:40-2:40 PM

Lunch

2:40-3:15 PM

Robust Identification of Multivariable Regression Models

Vojislav Filipovic, Professor, Institute of Archaeology, Belgrade, Serbia
Email: v.filipovic@open.telecom.rs

3:15-3:50 PM

EM Algorithm for Estimating Parameters of Transmuted Weibull Distribution

Arabin Kumar Dey, Professor, IIT Guwahati, Guwahati, Assam, India
Email: arabin@iitg.ac.in

3:50-4:25 PM

Skew Symmetric and Transmuted Probability Distributions

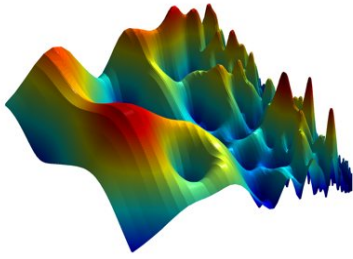
Gokarna R. Aryal, Professor, Purdue University Calumet, Hammond, IN, USA
Email: aryalg@purduecal.edu

“Theory and Application of Time Series”

Session II: Γ21

Date: June 29, 2012

Time: 11:00-1:40 PM



Organizer & Chair: **Shou-Hsing Shih**, Professor, American University of Sharjah, Sharjah, UAE
Email: sshih@aus.edu

11:00-11:35 AM

Selecting the Significant Technical Indicators to Predict Market Index Using Goal Programming

Fouad Ben Abdelaziz, Professor, American University of Sharjah, Sharjah, UAE

Email: fabdelaziz@aus.edu

11:35-12:10 AM

Forecasting Next Day's Directional Change in Financial Time Series

Hazim El-Baz, Professor, American University of Sharjah, Sharjah, UAE

Email: helbaz@aus.edu

12:10-12:30 AM

Break

12:30-1:05 PM

Utilization of System Identification Techniques to Predict future Moves of Gold Prices

A. H El-Sinawi and H. Al-Baz, Professor, American University of Sharjah, Sharjah, UAE

Email: aelsinawi@aus.edu

1:05-1:40 PM

A New Forecasting Approach for Non-Stationary Time Series

Shou-Hsing Shih, Professor, American University of Sharjah, Sharjah, UAE

Email: sshih@aus.edu

1:40-2:40 PM

Lunch

“Stochastic Analysis and Game Theory”



Session II: Γ21

Date: June 29, 2012

Time: 2:40-5:00 PM

Organizer & Chair: **Athanssios A. Pantelous**, Professor, University of Liverpool, UK

Email: A.Pantelous@liverpool.ac.uk

2:40-3:15 PM

Stochastic Damped Wave Equations

Takeshi Taniguchi, Professor, Kurume University Miimachi, Japan

Email: Rakeshi_taniguchi@krurme-u.ac.jp

3:15-3:50 PM

The Starlike Cycle Chains

Sophia L. Kalpazidou, Professor, Aristotle University of Thessaloniki, Greece

Email: sauth@otenet.gr

3:50-4:25 PM

Generalized Inverse for a Special Structure Matrix Appearing in Control

Athanssios A. Pantelous, Professor, University of Liverpool, UK

Email: A.Pantelous@liverpool.ac.uk

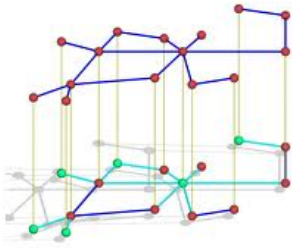
4:25-5:00 PM

Novel Frequency Domain Approach for Analyzing the Correlation between Technical Indicators and Movements of Financial Time Series Prices

B. H El-Sinawi, Professor, American University of Sharjah, Sharjah, UAE

Email: aelsinawi@aus.edu

“Bayesian Analysis and Modeling”



Session III: Γ22
Date: June 29, 2012
Time: 11:00-1:15 PM

Organizer & Chair: **Ram C Kafle**
University of South Florida, USA
Email: rckafle@mail.usf.edu

11:00-11:35 AM

Inverse Bayesian Learning of Model Parameter Vector, Given Matrix-Variate Data, Using New Matrix Variate Gaussian Process Based Method

Dalia Charkarwaty, Professor, University of Warwick, U K
Email: D.Chakrabarty@warwick.ac.uk

11:35-12:10 AM

Bayesian Methods in Environmental Pollution,

Salilesh Mukopadhyay, President and CEO, Feasible Solution LLC, USA
Email: smukhopadhyay@optonline.net

12:10-12:45 PM

A Betting Strategy in Major League Baseball using Bayesian Approach

Doo Young Kim, University of South Florida, Tampa, Florida, USA
Email: dooyoungkim@mail.usf.edu

12:45- 1:15 PM

Bayesian Estimate of Annual Percentage Change in Mortality Trend for Brain Cancer Data

Ram Kafle, University of South Florida, Tampa, Florida, USA
Email: rckafle@mail.usf.edu

1:15-2:15 PM

Lunch

“Teaching Statistics to Preschoolers”



Session IV: Γ24
Date: June 29, 2012
Time: 11:00-2:55 PM

Organizer & Chair: **Prof. Jenny Pange**
University of Ioannina, Greece
Email: jpagge@cc.uoi.gr

11:00-11:35 AM

Education Preschool Teachers on Probability Concepts

Aspa Lekka* and Jenny Pange, Professor, University of Ioannina, Greece
Email: aspalekka@hotmail.gr, jpagge@cc.uoi.gr

11:35-12:10 AM

Exploring Probabilistic Thinking in Preschoolers and In-Service Teachers

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12:10-12:45 PM

Can Preschoolers Understand the Notion of Chance and Random

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12:45-1:45 PM

Lunch

1:45-2:20 PM

Probability Estimations and Graph Representations by Preschoolers

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2:20-2:55 PM

Children's Perception on Risk

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