

EDITORIAL

FCAA NEWS: MEETINGS AND BOOKS

Virginia Kiryakova

Dear readers,

in the Editorial Notes we announce some important news for our journal, related anniversaries, information on new books and international meetings in FCAA (Fractional Calculus and Applied Analysis) areas, etc.

1. Forthcoming Meetings Related to FCAA Topics

FDA'12, The 5th IFAC Symposium on
Fractional Differentiation and Its Applications
Hohai University, Nanjing, China, May 14-17, 2012

Reminder: All details are on the website <http://em.hhu.edu.cn/fda12>, see our announce in: *Fract. Calc. Appl. Anal.*, Vol. 14, No 4 (2011); <http://www.springerlink.com/content/1311-0454/14/4/>

13th ICCC: International Carpathian Control Conference' 2012
High Tatras, Slovak Republic, May 28-31, 2012

Website: <http://web.tuke.sk/ICCC>

All details can be found at the above website, contacts by e-mail: iccc@tuke.sk. For the past ICCC conferences, see at <http://www.icc-conf.cz/>
Program Chairman: Igor Podlubny, IEEE, Techn. University of Košice
Publication Chairman: Ivo Petraš, IEEE, Technical University of Košice

The scientific program of the ICCC' 2012 conference will include the following parallel sections:

1. Measurement, sensors, monitoring and diagnostic systems.
2. Identification, modeling and simulation of processes and systems.
3. Theory and application of control systems.
4. Automation, mechatronics, robotics.

5. Intelligent embedded systems and instrumentation.
6. Information systems (SCADA/HMI, GIS, MES) and their Internet support.
7. Engineering application of informatics.
8. Quality control systems (TQM), production management and industrial logistics.
9. Engineering education in Control and Computer systems.
10. Embedded systems.

11. Fractional Calculus and Its Applications.

This 11th section will be organized by Igor Podlubny and Ivo Petraš.

AMEE' 2012: 38th International Conference
“Applications of Mathematics in Engineering and Economics”
Sozopol (on Black Sea), Bulgaria, June 8-13, 2012

Website: <http://www.tu-sofia.bg/ENG/fpmi/amee/>

See all details at the website. These annual conferences are organized by Faculty of Applied Mathematics and Informatics, Technical University of Sofia. The recent proceedings are published in: American Institute of Physics, Conf. Proceedings (see the last one, Vol. 1410 for AMEE' 2011, at <http://scitation.aip.org/proceedings/confproceed/1410.jsp>, buy at Springer, <http://www.springer.com/?SGWID=5-102-34-174286174-0&addToCart>

Chairperson of the Organizing Committee: Prof. Dr.Sc. Ketty Peeva;
 Chairperson of the Programme Committee: Asso. Prof. Dr. Vesela Pashcheva;
 Scientific Organizer: Asso. Prof. Dr. Georgi Venkov.

Contacts by e-mails: amee@tu-sofia.bg

Conference venue: The town of Sozopol is located 34 kilometers south of Bourgas on a rocky peninsula and is the oldest of Bulgaria's coastal towns. Founded in 610 BC by Miletian Greeks, their colony of Apollonia thrived as a middleman between the Greek world and the indigenous Thracians. Today, this charming place is a popular tourist resort on the Black Sea, known for its casual ambiance, two sandy beaches, and distinctive 19th-century stone and wood houses. The Conferences are held in the Leisure House of Sofia Technical University, and the Organizers are booking hotel rooms for intending participants close to the Conference venue.

The main topics are: – Mathematical Analysis and Applications - measures and integration, potential theory, functional analysis, Fourier analysis, approximations, special functions and integral transforms; – Differential Equations - ODE, PDE, integral equations, dynamical systems; – Differential Geometry - tensor analysis, differential topology, Lie groups, complex manifolds; – Operations Research, Economics, Programming -

stability, numerical methods, finance, mathematical modeling; – Numerical Methods in Mathematical Modeling; – Statistics, Probability theory - branching processes, reliability, queueing theory, industrial statistics; – Software Innovations in Scientific Computing - algebraic structures in informatics, discrete structures; – E-learning.

Participants interested in a **special session “Special Functions, Integral Transforms, Fractional Calculus”**, are kindly asked to contact Virginia Kiryakova, at virginia@diogenes.bg, subject: AMEE’ 2012.

**NAA’ 2012: 5th Conference on Numerical Analysis
and Applications
Lozenetz (on Black Sea), Bulgaria, June 15-20, 2012**
Website: <http://www.uni-ruse.bg/naa12/>

See all details at the website. The past NAA conferences were held at same place in 1996, 2000, 2004, 2008, with Proceedings published in Lecture Notes in Computer Science series, by Springer-Verlag.

Organized by Dept. of Mathematics and Informatics, University of Ruse “Angel Kanchev”

Chairman of the Organizing Committee: Prof. L. Vulkov

Contacts by e-mails: : lvalkov@uni-ruse.bg and mkoleva@uni-ruse.bg

Conference venue: A hotel in the village Lozenetz on the southern Black Sea-side of Bulgaria, June 15-20,2012.

The main tracks of the conference are planned to be:

1. Numerical Approximation and Computational Geometry
2. Numerical Linear Algebra and Numerical Solution of Transcendental Equations
3. Numerical Methods for Differential Equations
4. Numerical Stochastics
5. Numerical Modeling
6. High Performance Scientific Computing

**AMiTaNS’12: 4th Conference of the Euro-American
Consortium for Promoting the Application of Mathematics
in Technical and Natural Sciences
St.St. Constantine and Helena (On Black Sea), Varna
Bulgaria, June 11-16, 2012**

Website: <http://2012.eac4amitans.eu/>

See all details at the above website. This is the 4th annual AMiTaNS Conference, for the past ones see at: <http://2009.eac4amitans.eu>, <http://2010.eac4amitans.eu> and <http://2011.eac4amitans.eu>.

The recent proceedings are published in: American Institute of Physics, Conf. Proceedings (see the last one, Vol. 1404 for AMiTaNS'11, at <http://scitation.aip.org/dbt/dbt.jsp?KEY=APCPCS&Volume=1404&Issue=1>, buy at Springer, <http://www.springer.com/?SGWID=5-102-34-174286169-0&addToCart>

Organizers: Azmy S. Ackleh (University of Louisiana at Lafayette, USA), Christo I. Christov (University of Louisiana at Lafayette, USA), Michail D. Todorov (Technical University of Sofia, Bulgaria)

Contacts by e-mails:
conference@eac4amitans.eu, or eac4amitans@gmail.com

Conference venue: The resort St.St. Constantine and Helena is one of the top level vacation resorts in the Northern Bulgarian Black Sea coast. The complex comprises excellent resort hotels from three to five stars. It is situated close to the big city of Varna, which is an international hub.

The conference will be scheduled in plenary and keynote lectures followed by special and contributed sessions. The accents of the conference will be on Applied Analysis, Applied Physics, Biomathematics, Continuum Mechanics, Mathematical Physics, Numerical Methods, Scientific Computing, Solitons and Transport Processes which can be complemented by some specific topics in contributed special sessions.

**ICNPAA 2012 World Congress:
9th International Conference on Mathematical Problems
in Engineering, Aerospace and Sciences
Vienna Univ. of Technology, Vienna, Austria, July 11-14, 2012**
Website: <http://icnpaa.com/index.php/icnpaa/2012>

Prof. Seenith Siva (e-mail: seenithi@gmail.com) is sending this message on behalf of the **special session on "Fractional Dynamical Systems and Applications"** at this congress and 9th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences.

For further details, please visit the web site of the conference. You are invited to register on this website and submit your abstract using the following link: <http://icnpaa.com/index.php/icnpaa/2012/login>

**GFTA' 2012: 8th International Symposium
Geometric Function Theory and Applications
Ohrid, R. of Macedonia, August 27-31, 2012**
Website: <http://www.uab.ro/gfta-2012/>

On behalf of the Organizing and Scientific Committees, we would like to draw your attention to this forthcoming symposium, dedicated to the retirement of Prof. Shigeyoshi Owa. It will be held in Ohrid, at the Congress Centre of Ss. Cyril and Methodius University, on the shore of the Ohrid Lake. GFTA' 2012 is a continuation of the series of the other annual international GFTA symposia: Canada (2005), Romania (2006), Turkey (2007), Malaysia (2008), Romania (2009), Bulgaria (2010), Romania (2011).

Symposium Chair: Nikola Tuneski, e-mail: nikola.tuneski@mf.edu.mk

Main Topics:

- * Univalent and Multivalent Functions;
- * Special Functions and Series;
- * Differential Subordinations;
- * Conformal and Quasiconformal Mappings;
- * Geometric Function Theory in Several Complex Variables;
- * Potential Analysis and Applications;
- * Other areas related to GFTA.

Currently, a pre-registartion is hold, deadline to register and submit abstracts: 15 June 2012, at the symposium's website.

**International Conference on the Theory, Methods
and Applications of Nonlinear Equations**
Texas A&M Univ. - Kingsville, USA, December 17 - 21, 2012
http://www.tamuk.edu/artsci/math/conference_2012/about.html

The main aim of the conference is to promote, encourage, and bring together researchers in the fields of Ordinary Differential Equations, Partial Differential Equations, Functional Equations, Fractional Differential Equations, Delay-Differential Equations, Integral Equations, Integrodifferential Equations, Stochastic Differential Equations, Impulsive Differential Equations, Operator Equations, Difference Equations and Dynamic Equations on Time Scales. A special emphasis will be on the applications of Nonlinear Equations.

Kingsville, TX is a friendly safe city, the home of the legendary King Ranch, where heritage and history blend perfectly with nature and wildlife. Corpus Christi and its beaches are just 40 miles to the northeast, and the

border with Mexico is 120 miles to the south at Brownsville or 119 miles to the west at Laredo.

For contacts: Prof. Ravi P. Agarwal, e-mail: Agarwal@tamuk.edu

Chairman Dept. of Mathematics, Texas A&M University - Kingsville,
700 University Blvd., Kingsville, TX 78363-8202, USA

2. Recent Books Related to FCAA Topics

Saptarshi Das, Indranil Pan, *Fractional Order Signal Processing* (*Introductory Concepts and Applications*), 2012, 101 p., 6 illus., 5 in color, softcover: ISBN 978-3-642-23116-2,

Series: SpringerBriefs in Applied Sciences and Technology.

About this book: * Brief introduction to the field of fractional order signal processing; * MATLAB tools to simulate the theories are also introduced so that the readers can apply the theoretical concepts right-away and gain practical insight; * Written by experts in the field.

The book tries to briefly introduce the diverse literatures in the field of fractional order signal processing which is becoming an emerging topic among an interdisciplinary community of researchers. This book is aimed at postgraduate and beginning level research scholars who would like to work in the field of Fractional Order Signal processing (FOSP). The readers should have preliminary knowledge about basic signal processing techniques. Prerequisite knowledge of fractional calculus is not essential and is explicated at relevant places in connection to the appropriate signal processing topics. Basic signal processing techniques like filtering, estimation, system identification, etc. in the light of fractional order calculus are presented along with relevant application areas. The readers can easily extend these concepts to varied disciplines like image or speech processing, pattern recognition, time series forecasting, financial data analysis and modeling, traffic modeling in communication channels, optics, biomedical signal processing, electrochemical applications and many more. Adequate references are provided so that the researchers can delve deeper into each area and broaden their horizon of understanding. Available MATLAB tools to simulate FOSP theories are also introduced so that the readers can apply the theoretical concepts right-away and gain practical insight in the specific domain. Keywords: Fractional Calculus - Fractional Order Signal Processing - Signal Processing Matlab; Related subjects: Computational Intelligence and Complexity - Computational Science & Engineering - Signals & Communication

Find this book's information on SpringerLink,
[http://www.springerlink.com/content/
978-3-642-23116-2#section=957548&page=1](http://www.springerlink.com/content/978-3-642-23116-2#section=957548&page=1)

Richard Herrmann, *Fractional Calculus: An Introduction for Physicists*, World Scientific Publ. Co., Hackensack, NJ, 2011, 261 pp., ISBN 9789814340243, ISBN-10: 9814340243

About the book: Fractional calculus is undergoing rapidly and ongoing development. We can already recognize, that within its framework new concepts and strategies emerge, which lead to new challenging insights and surprising correlations between different branches of physics.

This book is an invitation both to the interested student and the professional researcher. It presents a thorough introduction to the basics of fractional calculus and guides the reader directly to the current state-of-the-art physical interpretation. It is also devoted to the application of fractional calculus on physical problems, in the subjects of classical mechanics, friction, damping, oscillations, group theory, quantum mechanics, nuclear physics, and hadron spectroscopy up to quantum field theory.

See Contents, Ordering Details, etc. at the websites:

http://www.google.bg/books?hl=bg&lr=&id=mPXzp1f7ycMC&oi=fnd&pg=PR5&dq=%22R.+Herrmann%22%2B%22Fractional+Calculus:+An+Introduction+for+Physicists%22&ots=Bnr-1faE-Z&sig=Anvqfm052rAQQRppTFaZUgg7UgU&redir_esc=y#v=onepage&q&f=false

http://www.holisticpage.com.au/FractionalCalculus:AnIntroductionForPhysicists_RichardHerrmann|9789814340243

Joseph Klafter, S.C. Lim, Ralf Metzler (Editors), *Fractional Dynamics (Recent Advances)*, World Scientific, eBooks, 2011, 532 pp., eISBN: 9789814340595

<http://ebooks.worldscinet.com/ISBN/9789814340595/9789814340595.html>

This volume provides the latest developments in the field of fractional dynamics, which covers fractional (anomalous) transport phenomena, fractional statistical mechanics, fractional quantum mechanics and fractional quantum field theory. The contributors are selected based on their active and important contributions to their respective topics. This volume is the first of its kind that covers such a comprehensive range of topics in fractional dynamics. It will point out to advanced undergraduate and graduate students, and young researchers the possible directions of research in this subject. In addition to those who intend to work in this field and those already in the field, this volume will also be useful for researchers not directly involved in the field, but want to know the current status and trends of development in this subject, as theoretical chemists, mathematical biologists and engineers. Table of Contents, see at

<http://www.worldscibooks.com/physics/8087.html>

FCAA related news, events and books (FCAA-Volume 17-4-2014) by Kiryakova, Virginia. Initial-boundary-value problems for the one-dimensional time-fractional diffusion equation by Luchko, Yuri. Fractional calculus for power functions and eigenvalues of the fractional Laplacian by Dyda, Bartłomiej. A Lyapunov-type inequality for a fractional boundary value problem by Ferreira, Rui. On fractional Lyapunov exponent for solutions of linear fractional differential equations by Cong, Nguyen/ Son, Doan and Tuan, Hoang. Maximum principle and its application for the time-fractional diffusion equations b meetings in FCAA (Fractional Calculus and Applied Analysis) areas, etc. 1. Forthcoming Meetings Related to FCAA Topics. "FDA™12, The 5th IFAC Symposium on. Fractional Differentiation and Its Applications." 700 University Blvd., Kingsville, TX 78363-8202, USA. 2. Recent Books Related to FCAA Topics. Saptarshi Das, Indranil Pan, Fractional Order Signal Processing (Introductory Concepts and Applications), 2012, 101 p., 6 illus., 5 in. color, softcover: ISBN 978-3-642-23116-2, Series: SpringerBriefs in Applied Sciences and Technology. About this book: * Brief introduction to the field of fractional order. signal processing; * MATLAB tools to simulate the theories are also introduced so that the readers can apply the theoretical concepts right-away. Thanks to Meeting Book Content Server, your organization will be able to effectively manage the preparation and distribution of digital documents for meetings. This system is fast, cost effective and offers greater control in terms of security. View details ».

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