

CCS2019
5th INTERNATIONAL INTERDISCIPLINARY
CHAOS SYMPOSIUM ON “CHAOS AND COMPLEX SYSTEMS”
MAY 09 – 12, 2019
PAPILLON AYSCHA HOTEL RESORT & SPA, BELEK, ANTALYA, TURKEY

P R O G R A M M E

THURSDAY, MAY 09, 2019

Registration (14:00 Check-in)

FRIDAY, May 10, 2019

9:00 – 9:50 Registration

9:50 – 10:20 CCS Opening Ceremony

10:20 – 11:20 Plenary Talk

EDGE OF CHAOS IN MEMRISTOR NETWORKS

Ronald Tetzlaff

Institute of Circuits and Systems, TU Dresden, Dresden, Germany

(R. Tetzlaff, M. Weiher, A. Ascoli, M. Herzig, S. Slesazek, T. Mikolajick, and Leon Chua)

11:20 – 11:40 Coffee Break

11:40 – 13:00 Session I (4 presentations – 20 mins each)

HYBRID MEMRISTOR-CMOS BASED FINITE IMPULSE RESPONSE FILTER DESIGN

K. Alammari, A. Sasi, A. Ahmadi, M. Ahmadi, M. Saif

Department of Electrical and Computer Engineering, University of Windsor, Windsor, Canada

EFFECTS OF CONTROL NON-IDEALITIES ON THE NONLINEAR DYNAMICS OF SWITCHING DC-DC CONVERTERS

D. Pikulins

Riga Technical University, Institute of Radioelectronics, Riga, Latvia

HYPERCHAOS-BASED STREAM CIPHER FOR SECURE SMS ON ANDROID PLATFORM

S. Sadoudi, S. Benzegane, D. Teguig and C. Tanougast

Laboratoire Télécommunications, Ecole Militaire Polytechnique, Algeria

Laboratoire LCOMS, Université de Lorraine, Metz, France

LEVERAGING NONLINEAR DYNAMICS AND CHAOS IN SMART STRUCTURES

A. Erturk

G. W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA, USA

13:00 – 14:30 Lunch Break

14:30 – 15:10 Session II (2 presentations – 20 mins each)

CML-TENT MODEL CHAOTIC BEHAVIOR WITH RESPECT TO THE STATE AND COUPLING PARAMETERS

M. Lampart and T. Martinovič

Department of Applied Mathematics, VŠB-Technical University of Ostrava, Ostrava, Czech Republic

IT4Innovations, VŠB-Technical University of Ostrava, Ostrava, Czech Republic

ESTIMATION OF KERENL FUNCTION USING APPARENT EARTH RESISTIVITY

Ho-Chan Kim, Chang-Jin Boo, Min-Jae Kang

Jeju National University, Department of Electrical Engineering, Jeju, Korea

Jeju International University, Department of Electrical Engineering, Jeju, Korea

Jeju National University, Department of Electronic Engineering, Jeju, Korea

SATURDAY, May 11th, 2019

09:20 – 10:20 Keynote Talk

Two different flavours of complexity in financial data

Tiziana Di Matteo

Department of Mathematics, King's College London, London, UK

10:20 – 10:40 Coffee Break

10:40 – 12:20 Session III (5 presentations – 20 mins each)

CHAOTIC SOLUTIONS FOR ASSET MANAGEMENT COMPLEXITY

G. Cziráki

University of Sopron, Alexandre Lamfalussy Faculty of Economics, Sopron, Hungary

COMPLEX NETWORK TIMESERIES ANALYSIS OF A MACROECONOMIC MODEL

I.P. Antoniadis, S.G. Stavrinos and M.P. Haniotis

American College of Thessaloniki, Division of Science & Technology, Thessaloniki, Greece

International Hellenic University, School of Science and Technology, Thessaloniki, Greece

International Hellenic University, Physics Department, Kavala, Greece

ON FAMILIES OF SOLUTIONS FOR META-FIBONACCI RECURSIONS RELATED TO HOFSTADTER-CONWAY \$10000 SEQUENCE

A. Alkan and O. Ozgur Aybar

PiriReis University, Graduate School of Science and Engineering, Tuzla - Istanbul, Turkey

TIME SERIES PREDICTABILITY, ENTROPY, AND CHAOS

Jiří Tomčala

IT4Innovations, VSB – Technical University of Ostrava, Ostrava, Czech Republic

PREDICTION OF ECHO FROM NOISE SIGNALS BY MEANS OF NONLINEAR TRANSFORM OF SIGNAL SPECTRA

D.E. Apushkinskaya and E.G. Apushkinskiy

Saarland University, Saarbrücken, Germany

Peoples' Friendship University of Russia (RUDN University), Moscow, Russia

Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russia

12:20 – 13:40 Lunch Break

13:40 – 15:20 Session IV (5 presentations – 20 mins each)

MOVEMENT CHARACTERISTICS OF A MODEL WITH CIRCULAR EQUILIBRIUM

M. Lampart and J. Nagyová

Department of Applied Mathematics, VŠB-Technical University of Ostrava, Ostrava, Czech Republic

IT4Innovations, VŠB-Technical University of Ostrava, Ostrava, Czech Republic

FRACTAL FUNCTIONS: A FUNCTIONAL EQUATIONS PERSPECTIVE

C. Serpa and J. Buescu

Centro de Matemática, Aplicações Fundamentais e Investigação Operacional, Instituto Superior de Engenharia de Lisboa, Portugal

Centro de Matemática, Aplicações Fundamentais e Investigação Operacional, Faculdade de Ciências da Universidade de Lisboa

DETERMINISM TESTING OF LOW-DIMENSIONAL SIGNALS EMBEDDED IN HIGH-DIMENSIONAL MULTIVARIATE TIME SERIES

C. Frühauf, S. Hartmann, B. Seifert and C. Uhl

Ansbach University of Applied Sciences, Center for Signal Analysis of Complex Systems, Ansbach, Germany

CHARACTERIZATION OF CARDIAC CELL ELECTROPHYSIOLOGY MODEL USING RECURRENCE PLOTS

R. Halfar

IT4Innovations, VŠB-Technical University of Ostrava, Ostrava, Czech Republic

CHAOTIC APPROACH BASED FEATURE EXTRACTION TO IMPLEMENT IN GAIT ANALYSIS

S. İkizoğlu and B. Atasoy

Istanbul Technical University, Department of Control & Automation Engineering, Istanbul, Turkey

Pîrî Reis Maritime University, Department of Mechanical Engineering, Istanbul, Turkey

15:20 – 15:50 CCS Closing Ceremony

SUNDAY, May 12th, 2019

Free day (12:00 Check-out)