PROGRAM/TIMETABLE

MONDAY, 18.10.2021   2nd Conference on Nonlinearity

10:00 –10:10 (10 min) : *Opening*
10:10 – 10:45 (35 min) : Ryo Yoshida
Self-oscillating polymer gels as novel biomimetic softmaterials
10:50 – 11:15 (25 min) : Vladimir Skarka
Self-organized bridge connecting theory to experiments

11:15 – 11:30 (15 min) : BREAK

11:30 – 12:15 (45 min) : Boris Malomed
Singular nonlinear bound states and vortices in attractive potentials
12:20 – 12:45 (25 min) : Alexandra Maluckov
Scanning band topology by the modulation instability
12:50 – 13:15 (25 min): Vsevolod Sakbaev
Dynamics of quantum states generated by the nonlinear Schrodinger equation

13:15 –14:30 (75 min) : LUNCH

14:30 –15:05 (35 min) : Milivoj Belic
Weird light propagation in strange and not-so-strange systems: From accelerating Airy to fractional Schrodinger beams
15:10 –15:35 (25 min) : Dusan Jovanovic
Fluid Theory of Coherent Magnetic structures in Space Plasmas
15:40 – 16:05 (25 min) : Rade Zivaljevic
The problem of envy-free division from the view point of algebraic topology

16:05 – 16:20 (15 min): BREAK

16:20 – 16:45 (25 min) : Zeljko Cupic
CONTEMPORARY RESEARCH IN OSCILLATORY CATALYTIC REACTIONS

TUESDAY, 19.10.2021   2nd Conference on Nonlinearity

10:00 – 10:45 (45 min) : Yuri Kivshar
Nonlinear Nanophotonics and Metasurfaces
10:50 – 11:15 (25 min) :   Fotios Georgiades
Exact augmented perpetual manifolds define specifications for rigid body modes in mechanical systems

11:15 – 11:30 (15 min) : BREAK

11:30 – 12:05 (35 min) : Bosiljka Tadic
Modeling dynamics of magnetization reversal in geometrically-frustrated nanonetworks
12:10 – 12:35 (25 min) : Stanko Nikolic
The nature of optical rogue waves
12:40 – 13:05 (25 min): Katica (Stevanovic) Hedrih
Angular velocity and intensity change of basic vectors of tangent space of a position vector of a material system kinetic particle in two generalized functional curvilinear coordinate system

13:05 –14:30 (85 min) : LUNCH

14:30 –15:05 (35 min) : Andrew Adamatzky
Advances in computing with Belousov-Zhabotinsky medium
15:10 –15:35 (25 min) : Zvonko Rakaric
A new mathematical and mechanical oscillatory model for the detection of ultra low frequency signals
15:40 – 16:05 (25 min) : Paszkal Papp
Spatial separation of precipitate in reactive media

16:05 – 16:20 (15 min): BREAK

16:20 – 16:45 (25 min): Aleksandar Obradovic
MASS MINIMIZATION OF AN AFG TIMOSHENKO BEAM WITH A COUPLED AXIAL AND BENDING VIBRATIONS
16:50 – 17:15 (25 min) : Stepa Paunovic
Modelling the material nonlinearity of steel fibre reinforced concrete

WEDNESDAY, 20.10.2021   2nd Conference on Nonlinearity

10:00 – 10:35 (35 min) : Igor Volovich
Integrability of quantum and classical dynamical systems
10:40 – 11:15 (35 min) : Irina Arefeva
Holographic Renormalization Group Flows

11:15 – 11:30 (15 min) : BREAK

11:30 – 11:55 (25 min) : Lyudmila Efremova
About Geometrically Integrable Discrete Dynamical Systems and Their Periodic Orbits
12:00 – 12:25 (25 min) : Olena Vaneeva
Symmetries and exact solutions of nonlinear models of physical and biological processes
12:30 – 12:55 (25 min) : Bozidar Jovanovic
Integrable canonical transformations

13:05 –14:30 (85 min) : LUNCH

14:30 –14:55 (25 min) : Radu Constantinescu
Alternative approaches in finding travelling wave solutions for nonlinear evolutionary
phenomena
15:00 –15:25 (25 min) : Corina Babalac
Auxiliary equations for solving nonlinear evolutionary equations
15:30 – 15:55 (25 min) : Dmitry Serow
Plane Quazicrystals and Four Colours Problem: Trivalent Graph Colouring and Wada Basins

15:55 – 16:10 (15 min): BREAK

16:10 – 16:55 (45 min): James Yorke
The equations of nature and the nature of equations
17:00 – 17:25 (25 min) : Nikola Petrovic
Solving large classes of nonlinear partial differential equations by employing the Jacobi Elliptic
function expansion method

THURSDAY, 21.10.2021   2nd Conference on Nonlinearity

10:00 – 10:35 (35 min) : Sergei Odintsov
Use Axion modified gravity cosmology
10:40 – 11:15 (35 min) : Luka Popovic
Supermassive binary black holes in centers of galaxies - theory vs. observations

11:15 – 11:30 (15 min) : BREAK

11:30 – 12:05 (35 min) : Miguel Sanjuan
Binary Black Hole Shadows: Chaos in General Relativity
12:10 – 12:35 (25 min) : Predrag Jovanovic
Graviton mass and Yukawa-like nonlinear correction to the gravitational potential:
constraints from stellar orbits around the Galactic Center
12:40 – 13:05 (25 min): Branko Dragovich
On p-Adic Matter

13:05 –14:30 (85 min) : LUNCH

14:30 –15:05 (35 min) : Mathew Cartmell
The terrestrial detection of frame dragging
15:10 –15:35 (25 min) : Alexander Prokopenya
Periodic Motion of a Swinging Atwood's Machine
15:40 – 16:05 (25 min) : Goran Djordjevic
Some Notes on the Time-Dependent Harmonic Oscillator

16:05 – 16:20 (15 min): BREAK

16:20 – 16:45 (25 min) : Jelena Stankovic
Nonlocal de Sitter Gravity and its Cosmology
16:50 – 17:15 (25 min) : Marko Stojanovic
Attractor behavior of the holographic inflation model with tachyon-type potentials

FRIDAY, 22.10.2021   2nd Conference on Nonlinearity

10:00 – 10:25 (25 min) : Andjela Rodic
Investigating the SARS-CoV-2 virus transmission using a non-linear compartmental epidemiological model
10:30 – 10:55 (25 min) : Denis Shulga
Quantum relaxation effects in Microtubules

10:55 – 11:10 (15 min) : BREAK

11:10 – 11:35 (25 min) : Slobodan Zdravkovic
W-potentials in Nonlinear Biophysics of Microtubules
11:40 – 12:15 (35 min) : Nenad Filipovic
How far we are from insilico clinical trials for cardiovascular disease?
12:20 – 12:45 (25 min) : Vera Markasheva
Asymptotic behavior of entire solutions for degenerate partial differential inequalities on Carnot-Carathéodory metric spaces and Liouville type results

12:45 –14:15 (90 min) : LUNCH

14:15 –14:40 (25 min) : Sergey Shirmovsky
Energy transformation mechanisms in microtubules
14:40 –15:00 (20 min) : Sofija Markovic
Inferring COVID-19 severity determinants by combining epidemiological modeling and machine learning
15:05 – 15:25 (20 min) : Bojana Ilic (Blagojevic)
Global COVID-19 growth signatures used to characterize COVID-19 non-linear infection dynamics

15:25 – 15:40 (15 min): BREAK

15:45 – 16:10 (25 min): Mirjana Filipovic
The procedure of generating trajectory of motion of carrier conveyor for granular material in dependent of pod systems characteristics
16:15 – 16:40 (25 min) : Umaaran Gogilan
Implementation of state observer-based conditioned reverse path method to the identification of a nonlinear system
16:45 – 17:00 (15 min): *Closing*