



UNIVERSITY OF CRAIOVA
FACULTY OF SCIENCES
DEPARTMENT OF PHYSICS
13 A.I. Cuza Str. 200585, Craiova, Romania



University of Craiova
Promoter of cooperation in the Balkan Region
April 22-27, 2024, Craiova, Romania

"QFT AND NONLINEAR DYNAMICS"

Scientific presentations to be given in the Workshop

❖ **Thursday, April 25**

Vladimir Gerdjikov (INRNE Sofia, BG) - Two soliton interactions of multicomponent NLS equations and their gauge equivalent.

Stoyan Mishev (Free Univ. Sofia, BG)- Equivariant transformations in neural networks

Ion Cotaescu (West Univ Timisoara, RO)- New dynamical black holes.

G. S. Djordjević, D. D. Dimitrijević, M. Miliošević and M. Stojanović (Nis Univ., SRB) - On Braneworld Inflation and Attractor Behaviour.

Aurelian Isar (NIPNE Magurele, RO) - Irreversibility and entropy production in the open quantum systems of two coupled bosonic modes.

D. Dimitrijevic, G.S.Djordjevic, M.Milioševic, M.Stojanovic (Nis Univ.SRB) - Cosmological Inflation with Two Scalar Fields.

Marija Dimitrijevic Ciric (Belgrade Univ., SRB) - Braided BV quantization of noncommutative field theories: General.

Djordje Bogdanovic (Belgrade Univ., SRB) - Braided BV quantization of noncommutative field theories: Example of Φ^3 scalar field theory.

Nikola Konjik (Belgrade Univ., SRB) - Noncommutative fermionic quasinormal modes of RN BH

Tatiana Mihaescu (NIPNE Magurele, RO) - Markovian evolution of quantum correlations in strongly coupled bosonic modes.

Stefan Carstea (NIPNE Magurele, RO) - Rotating polygonal patterns of Leidenfrost tori as cnoidal waves.

Ionel Roventa (Craiova Univ., RO) - The approximation of boundary controls for the wave equation in rectangular domains.

❖ **Friday, April 26**

Victor Slupic (NIPNE Magurele, RO) - Dynamical aspects of multifield cosmological models.

Silviu Sararu (Craiova Univ, RO)- Degrees of freedom and quantization of higher derivative MCSP model

C. Bizdadea, E.M. Cioroianu, S.O. Saliu (Craiova Univ, RO)—A 'real' perspective on the couplings between massless spin-0 and spin-1/2 charged particles mediated by an electromagnetic field

Corina Babalic (Craiova Univ, RO)- Coupled discrete additive Bogoyavlensky and the periodic reduction.

Mihai Cimpoiasu (British Geological Survey, Nottingham, UK), 4D geoelectrical imaging technology for monitoring critical geotechnical assets and sensitive ecosystems

E.M. Cioroianu, S. Manolescu (Craiova Univ, RO) - Geometric structures for various fermionic fields: a Darboux argument

Mihaela Udristioiu (Craiova Univ, RO) - Forecasting and modelling air pollution in Craiova, using Machine Learning