## 1 Day 1: Thursday, the 20th of November

9.30 - 10.00	Registration	
10.00 10.20	Hall 2.1 - Library Building	
10.00 - 10.30	Opening Ceremony	
	Hall 2.1 - Library Building	
10.30 - 13.00	KNS – Moderator: Antonela Toma	
10.30 – 11.10	Jorge Jimenez Urroz, Universidad Politecr	nica de Madrid, Spain
	Factoring RSA moduli with extra information	on
11.10 - 11.40	Coffee break	
11.40 – 12.20	Radu State, University of Luxembourg, Luxembourg	
	Attacking LLMs	
12.20 – 13.00	Emil Simion, National University of Science and Technology POLITEHNICA Bucharest,	
	Romania	
	Bridging the Gaps: Cyber Resilience Assess	ment and Certification: from Standards to
	Practice in the Context of NIS2, CSA & CRA	
13.00 – 14.00	Lunch	
14.00 - 17.30	Parallel Sessions	
14.00 - 15.30	Hall 2.1	Hall CE 304
	Moderator: Elena Corina Cipu	Moderator: Vasile Pop
	Laurance Fakih - On A Model Of Rumors Spreading Through Social Media	Ioana Monica Masca - About Some Exponential Equations
	Romain Mrad, Mario Lefebvre - Average Overshoot Of Jump-Diffusion Processes	Florin Bojor, Magnolia Anda Tilca – Noncommutative Groups
	Svershoot Grading Billusion Freediscs	Groups
	Andrei-Vasile Spoială, Mihai-Ștefan Curpăn, Andrei Manta, Antonela Toma, Răzvan Moraru	Nicolae Mușuroia - Similarity In The Complex Plane
	- Prerequisite Conditions For Maintaining The	Vasile Pop - Integer Matrices That Leave Remarkable
	Nuclear Transmutation In Laser-Driven Subcritical Reactors	Functions Invariant
	Reactors	Maria-Giulia Gheorghiu - Optimizing Lessons Through
	Diana Radu, Alex-Andra Cristache, Antonela Toma, Răzvan Moraru -	Mathematical Models Of Attention And Retention
	A Research On The Possibility To Safely Use The	<b>Dumitrescu Dan-Stefan</b> – Double Counting – The
	Raman Spectroscopy In-Vivo	Secret Key In The Architecture Of Mathematical Problem Solving
		Simona Bucurenciu - Using Discovery Method To
	Victor Dorca, Nicoleta-Cătălina Mitu, Antonela	Uncover The Mathematics Behind A Magic Card Trick
	<b>Toma, Răzvan Moraru</b> - Bridging Classical Imaging And Quantum Information	
	maging And Quantum mormation	

	Andrada-Livia Cirneanu, Cristian-Emil Moldoveanu, Alin-Constantin Sava, Linko Nikolov, Giulia Boetti, Bartosz Kozicki - Integrating Digital Mathematics And Artificial Intelligence In Modern Defence Education  Diana Rodica Radnef-Constantin, Dumitru Popescu – Analytical Solution Of The Pulsatory Liposome Using The Concentration Hypothesis And Trigonometric Approximation  Andreea Ioana Bordianu - Sdepth And Hdepth Of Some Classes Of Edge Ideals Of Graphs  Mircea Cimpoeas - Weak Almost Monomial Groups And Artin'S Conjecture  Cristian-Emil Moldoveanu - Mathematical Modelling Of Instabilities In Counter-Rotating Vortex Pairs	Vlad-Andrei Perpelea - An Application Of Perron– Frobenius Theory For Positive Matrices  Sorin Ulmeanu - Newton's Identities And Their Applications To University Admission Problems  Andrei Pană, Robert Pop, Robert Rogozsan - Cazul De Egalitate În Inegalitatea Lui Sylvester  Petru Marian Braica - Transition From Incenter To Excenter, A Source Of New Problems  Gheorghe Boroica - Algebraic Identities As Sources Of Problems  Robert Berezovski - Artificial Intelligence: An Urgent Need In Initial Teacher Training
15.30 - 16.00	Coffee Break	
16.00 – 17.30	Coffee Break  Hall 2.1  Moderator: Simona Mihaela Bibic  Iulian-Nicolae Petriia, Antonela Toma, Octavian Postăvaru - Deploying A Light Model For Analysing Thyroid Tumors. A Mathematical Approach  Elvis-Costin Țucă, Sorin-Teodor Chicuş - Algorithmic Optimization Of Low-Voltage Electrical Networks  Kaan Nasurla - Design And Mathematical Modeling Of A Device For Detecting And Locating Potentially Dangerous Sounds In The Forest  Denis-Gabriel Codreanu - Predicting A Player's Performance In Electronic Sports  Andrei-Adrian Răgman, Cătălin-Marius Duță - Integrating Fit And Interpretability: A Penalized Optimization Framework For Exploratory Factor Analysis  Alin-Teodor Bratu - Probabilistic Analysis Of Skip List Search Complexity  Stefan Bejenescu-Babusanu - Uncertainty-Aware Cost Field Fusion And Time-Consistent Planning For Bfmc Autonomous Vehicles  Ana-Maria Marin, Calin-Tudor Topan, Mihai Rebenciuc, Antonela Toma - Elements Of Climate And Related Analysis In The Context Of Pseudomatrix Technologies	
17 30 10 00	And Landau Distributions  Dinner	
17.30 – 19.00	Dinner	

Day 2: Friday, the 21st of November

9.	30 - 10.00	Registration	
		Hall 2.1 – Library Building	
10	0.00 - 12.00	KNS – Moderator: Antonela Toma	
	10.00 - 10.40	Ion Turcanu, Luxembourg Institute of Scien	nce and Technology, Luxembourg
		Inter-UE Coordination in 5G New Radio Side	elink Communications
		Coffee break	
	10.40 - 11.10	Ştefan Cruceanu, "Gheorghe Mihoc - Caius	Iacob" Institute of Mathematical Statistics and
	11.10 - 11.50	Applied Mathematics, Romanian Academy, I	Romania
		Mathematics in surface water dynamics	
		Cristian Doicin, National University of Science and Technology POLITEHNICA Bucharest,	
	11.50 - 12.30	Romania	
		From Bayes to Neural Networks - Mathemati	ical Ideas that Power Intelligence
12	2.30 - 14.00	Lunch	
14	1.00 – 17.30	Parallel Sessions	
	14.00 - 15.30	Hall 2.1	Hall CE 304 – <b>Online Presentations</b>
		Moderator: Raluca Purnichescu Purtan	Moderator: Irina Bradalexi
		Cristina Hretcanu - Some Remarks On Almost	Mohamad Nasser - Representations ( 14.00 - 17.30
		Hermitian Metallic Manifolds And Their Submanifolds	Group And Their Extensions To The Singular Braid Monoid
		Suomanifolds	Monoid
		Bogdan Sebacher, Silvia Marzavan - Comparison	Olfat Al Lakkies - Stability Analysis In A Mutualism
		Of Element-Free Galerkin And Indicator Kriging	Model With Two Discrete Delays
		Approaches In Updating Facies Probability Fields	Ghezzar Mohammed Amine - Control With Minimum
		Kaan Nasurla - From Fixed Points To Fractal	Energy Problem For A Singular Two-Dimensional
		Maps: A Mathematical Modeling For Early	Continuous–Discrete Linear Systems
		Pathological Identification In Medical Imaging	·
		Link to the control of the control o	Kamel Benyettou, Djillali Bouagada, Ghezzar
		Liviu Ignat - Approximations Of The Best Constants	Mohhamed Amine - A Novel Approach To Solving Conformable Fractional 2d State Space Continuous-
		Constants	Time Linear Systems
		Stefan Garoiu - The Represnetation Of The Limit	·
		Of Power Series Of Positive Linear Operators Using	Bogdan Maxim - A Doubly Nonlinear Parabolic
		The C_0-Semgiroup Generated By Thier Iterates	Problem With Variable Exponents, Homogeneous Neumann Conditions And Generalized Logistic Source
		Valeria Cîrlan - A Comprehensive Review Of	ivenimanii Conditions And Generalized Logistic Source
		Convex Functions: Classifications, Properties, And	Mahmoud A. Ibrahim - Global Dynamics Of A
		Applications	Tumor Growth Model With Three Mechanisms
			Kissi Mohammed El Amine, Abdelkader Lakmeche,
			Andrei Halanay, Mohammed Bouizem, Mohamed

Radu Gaba - Implementing C++ Computer
Programs For Some Classes Of Complex Elliptic
Curves

**Bianca Vasian -** Generalized Kantorovich Operators

Bianca-Maria Colan, Andrei-Ionuț Danescu, Emil Simion - Adaptive Communication Security Using Ai-Driven Crypto-Agility

Emil Simion, Bogdan Costel Mocanu, Florin Nastase - Statistical Evaluation Of Entropy Generators: Analysis Of Second-Order Errors In Nist Sp 800-22 Tests

**Kusko Cristian, Emil Simion** - Quantum Communications At Imt Bucharest And Bluespace Technology **Helal** - Understanding Xylella Fastidiosa Spread In Olive Trees Through Delay Differential Modeling

Mansouria Saidani - Alysis Of Solutions For Higher Order Linear Difference Equations With Finite  $\Phi$  - Order Coefficients

Mohammed Nadjib Benamar, Mohammed Amine Ghezzar, Djillali Bouagada - On The Controllability Of Positive Fractional 2d Continuous-Time Linear Systems

**Marilena Ciontescu** - A Variational Approach To Optimal Control With Generalized Invariant Convex Interval-Valued Functionals

**Marius-Alin Dragu -** On A Tumoral Growth Model With Constrained Curvilinear Integral Functionals And Gradient-Type Variations

**Souad Salmi, Djillali Bouagada** - A New Perspective On The Lml Region And D\_D Stability Of Fractional Multidimensional State-Space Models

**Stefan-Razvan Anton -** Fractional Parameter Fusion For Cnn Model Version Merging

**Abdelaziz Oualid -** Boundary Value Problems For Fractional Differential Inclusions With Caputo-Hadamard Type Derivative

Nisrine Miliani, Djillali Bouagada, Kamel Benyettou - Analytical Methods For Stabilizing Fractional Multidimensional Discrete

**Ana-Gabriela Tămaș, Mircea Şușcă** - Numerical Methods For Solving Sylvester And Lyapunov Equations: Challenges And Implementation In Matlab

Alina-Claudia Precup, Mircea Şuşcă, Vlad Mihai Mihaly - Convex Formulation Of Approximate Feedback Linearization And Convergence Rate Control

**Albescu Oana -** Connections Between Exponential And Polynomial Concepts For Random Semi-Dynamic Systems

**Andreea Cunțan -** On The Upper Bound Of The Third Hankel Determinant For The Class Of Starlike Functions Of Order A

		Khalifa Boumzough, Adnane Azzouzi, Abdeljalil
		Nachaoui - The Convergence Of The Jn Relaxed
		Algorithm For Convection-Diffusion Cauchy Problems
		Ana-Gabriela Tămaș, Mircea Șușcă - Numerical
		Methods For Solving Sylvester And Lyapunov
		Equations: Challenges And Implementation In Matlab
		Maroua Amel Boubekeur - A Hybrid Differential
		Framework For Horizontal And Horizontal–Vertical
		Transmissions
15.30 – 16.00	Coffee Break	
16.00 - 17.30	Hall 2.1	Hall 2.2
	Moderator: Ioana Bogdan	Moderator: Elena Corina Cipu
	Iustin Markis, Vlad Mihaly - Neural Network-	Andreea Cristina Mitru, Dana Danciulescu -
	Based Feedback Linearization For Non-Smooth	Considerations Regarding Intelligent Data Validation
	Tracking	Systems
	Mihnea-Andrei Vitejeanu, Matei Buliga, Paul-	Eduard-Ştefan Sandu - From Vulnerability To
	Andrei Ungureanu - Dimensional Scaling For	Resilience In The Necessity Of Multi-Factor
	Solving Diverse Computational Problems	Approaches In Signature Verification
	David-Theodor Ionita, Ioana Corina Bogdan -	Ștefan-Cătălin Petrescu, Elena Corina Cipu -
	Development Of A Self-Hosted Personal Cloud	Mathematical Modeling And Machine Learning
	Server With Iot Integration And Remote Access	Approaches For Predicting Online Course Dropout
	Capabilities	Probability
	Adela Ionescu - On The LMI Feasibility In	
	Analyzing The Stability Of 2d Dynamical Systems.	Simona Mihaela Bibic, Mara Muntenașu, Petru-
	The Case Of Systems Arising From Excitable	Cristian Grămescu, Flavius Lung, Andreea-
	Media	<b>Teodora Cornea</b> - Designing Hybrid Library Systems
	Andrei Ghenoiu, Ana-Maria Marin, Mihai	With Evolving Technologies
	Rebenciuc, Emil Simion - Alternative Transport	Mihnea-Ioan Stănilă, Raul-Cosmin Guriencu,
	Routes In The Context Of Pseudomatrix	Simona Mihaela Bibic - Federated Tinyml Framework
	Technologies And Real-Time Management	For Adaptive Ai Agents In Implantable Neural Chips
		Simona Mihaela Bibic, Nicoleta Popa, Vlad Dicu -
	Ion-Nicholas-Anthony Berechet, Andrei-	A New Era Of Learning: Ai Digital Support For
	Valentin Nae, Edward-Mircea Stiop, Simona	Academic Communities
	Mihaela Bibic, Diana Rodica Radnef-Constantin	
	- Differential Wrapper Hierarchical Qpsk Under	Teodora-Georgiana Banu, Elena-Sorina Niculăesa,
	Atmospheric Impairments For Cubesat	Emil Simion - Fractal Parameter Steganography:
	Communications	Encoding Information In The Mathematics Of Images
	Eduard Kecs, Robert Kecs - Vector Calculus	Elena Corina Cipu, Vasile Nicolae Stănciulescu,
	And Signal Theory With Applications In	Vasile Preda - Numerical Methods For Sdes With
	Engineering	Economic Applications
	David-Theodor Ionita, Ioana Corina Bogdan,	
	Horia Alexandru Modran - Development Of A	

	Self-Hosted Personal Cloud Server With Iot
	Integration And Remote Access Capabilities
	Elena Corina Cipu, Ruxandra-Ioana Cipu,
	Teodor Andrei Cipu - Parameter Analysis In
	Electrospinning Process
	Alexandra-Maria Borş, Simona Mihaela Bibic,
	Andreea Milosteanu - Visual Ai-Based Assistant
	For Enhanced Driving Awareness And Safety
17.30 – 19.00	Dinner

Day 3: Saturday, the 22nd of November

11.00 - 12.00	Hall 2.1
	Round Table: Smart Universities: The AI Revolution in Higher Education Education
12.00 - 13.30	Lunch
13.30 - 15.00	Hall 2.1
	Discussions: AI, Mathematics, and the Evolution of Academic Knowledge in the Digital Age Universities of Tomorrow
15.00 - 15.30	Coffee Break
15.30 - 16.30	Closing Ceremony
Location	Splaiul Independenței nr. 313, sector 6, Bucharest (the main campus)
	All the meetings take place in one of the following 3 Halls: <b>2.1</b> , <b>2.2</b> , <b>CE 304</b> , more precisely:
	• Halls 2.1, 2.2 are located within the <i>Library Building</i>
	• CE304 is located within the <i>FIIR Building</i>
	that are situated within the university campus as the map illustrates:

