

\*The event time : 9:00 A.M. – 1:00 P.M. Central Standard Time of Mexico (8:30P.M. – 12:30 P.M. Indian Standard Time)



## PROGRAMME SCHEDULE

*International Conference on Nonlinear Analysis and Applications-2022 (ICNAA-2022)*

*(India and Mexico)*

*Assam Don Bosco University, Sonapur, Assam, India, Technological University of the Mixteca, Oaxaca, Mexico and Ramniranjan*

*Jhunjhunwala College (Autonomous), Ghatkopar, Mumbai, India*

*22-23 November, 2022*

**(ONLINE)**

Time (Mexico CST)	Events	ZOOM Meeting Link:
<b>Inaugural Ceremony: ZOOM Link: [<a href="https://us02web.zoom.us/j/82213570339?pwd=dC9ZQzFBUCswSFYxeDhPVndQZ2FYUT09">https://us02web.zoom.us/j/82213570339?pwd=dC9ZQzFBUCswSFYxeDhPVndQZ2FYUT09</a></b> <b>Meeting ID: 822 1357 0339 Passcode: 599019]</b>		
9:00-9:30	<b>Inaugural Ceremony (Online)</b>	
9:30-10:15	Keynote Speaker <b>Prof. Ravi P. Agarwal</b> , Texas A & M University, USA	Unbounded solutions of third-order three-point boundary value problems on a half-line
<b>10:15 – 10:30</b>	<b>Break</b>	
<b>10:30 – 12:50</b>	<b>Technical Session I</b>	
<b>Parallel Session 1A [ZOOM Link: <a href="https://zoom.us/j/91551550367?pwd=Mml0ek5NY2hXaUhLOWNYcTMvOTV4Zz09">https://zoom.us/j/91551550367?pwd=Mml0ek5NY2hXaUhLOWNYcTMvOTV4Zz09</a></b> <b>Meeting ID: 915 5155 0367 Passcode: 835244]</b>		
<b>Session Chair</b>	<b>Prof. Juan Eduardo Nápoles Valdes</b> , Universidad Nacional del Nordeste, Argentina	
<b>10:30-11:00</b>	<b>Invited talk</b>	<b>Prof. L. D. R. Kocinac</b> , University of Nis, Serbia
<b>11:00-11:30</b>	<b>Invited talk</b>	<b>Prof. Valentin Skvortsov</b> , Honored Professor of Moscow State University, Russia
11:30-11:40	Teguh Leonardo Meliala	ICNAA2022/A01 n –bonacci function, its properties and its relation with n- Fibonacci numbers
11:40-11:50	Al Azhary Masta	ICNAA2022/A02 An Inclusion Property of Weighted Orlicz–Morrey Spaces of Nakai’s version
11:50-12:00	Francisco Javier Mendoza-Torres	ICNAA2022/A03 On the convergence of the symmetric truncated Dirichlet integral
12:00-12:10	Clemente Cesarano	ICNAA2022/A04 Some new classes of degenerate unified Hermite polynomials
12:10-12:20	Rishikesh Yadav	ICNAA2022/A05 Approximation of function of two variables by bivariate operators in polynomial weight spaces
12:20 - 12:30	Meena Joshi	ICNAA2022/A06 Relation-theoretic contractions and its application in relational partial metric space
12:30-12:40	Rishi	ICNAA2022/A07 A New Approach To Establish The Existence of Coincidence Point In C*-algebra Valued Metric Space
12:40-12:50	P. Jitendra Kumar	ICNAA2022/A08 Strichartz inequality for orthonormal functions associated with Dunkl Laplacian

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Senapati

and Hermite Schrodinger operators

**Parallel Session 1B [ ZOOM Link: <https://zoom.us/j/95676262994?pwd=OHhKN05BMFBZQWRTeTNHdURqVEpTUT09>  
Meeting ID: 956 7626 2994 Passcode: 351905]**

**Session Chair : Prof. Ekrem Savas, Usak University, Usak-Turkey.**

<b>10:30-11:00</b>	<b>Invited talk</b>	<b>Prof. Martin Bohner, Missouri S &amp; T, Rolla, Missouri, USA</b>	
<b>11:00-11:30</b>	<b>Invited talk</b>	<b>Dr. Syed Abbas, Indian Institute of Technology, Mandi, India</b>	
11:30-11:40	John Pamba	ICNAA2022/B01	Some Fixed-Point Results of Set-Valued Graphic Contractions in Hausdorff Controlled Partial Metric Spaces
11:40-11:50	Anca Croitoru	ICNAA2022/B02	Properties of Riemann-Lebesgue integrable functions and weakly Riemann-Lebesgue integrable functions
11:50-12:00	Sandra Carillo	ICNAA2022/B03	Backlund Transformations and Noncommutative Nonlinear Evolution Equations
12:00-12:10	Işıl Açık Demirci	ICNAA2022/B04	On Rough $I_2$ -Lacunary Statistical Convergence Of Double Sequences In Cone Metric Spaces
12:10-12:20	Harvindra Singh	ICNAA2022/B05	Spectral approximation for elliptic eigenvalue problem on non-smooth domain
12:20 - 12:30	Shubham Kumar	ICNAA2022/B06	Some conditions for the unique solvability of a new class of absolute value equations.
12:30-12:40	Subhajit Bera	ICNAA2022/B07	"Nörlund and Riesz Mean of Sequences of Bi-complex Numbers
12:40-12:50	Diksha Debbarma	ICNAA2022/B08	Relative Uniform Convergence of Sequence of Functions Related to $l_p$ -space.

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**Parallel Session 1C [ZOOM Link: <https://us02web.zoom.us/j/82213570339?pwd=dC9ZQzFBUCswSFYxeDhPVndQZ2FYUT09>**

**Meeting ID: 822 1357 0339 Passcode: 599019]**

**Session Chair Prof. Talat Nazir, University of South Africa, South Africa**

**10:30-11:00 Invited talk Prof. M. Murseleen, Aligarh Muslim University, India**

**11:00-11:30 Invited talk Prof. Eberhard Malkowsky, State University of Novi Pazar, Serbia**

11:30-11:40 Ali Zakaria Idriss ICNAA2022/C01 Iterated Function Systems of Multivalued Mappings in Partial Metric Spaces

11:40-11:50 Federico Zullo ICNAA2022/C02 Schwarzian derivative, PXXV-Ermakov equation and Backlund transformations

11:50-12:00 Tomás Pérez ICNAA2022/C03 A simplified form to introduce Sobolev spaces and applications to ordinary differential equations  
Becerra

12:00-12:10 Juan H. Arredondo ICNAA2022/C04 Extensions of operators related to Fourier Transform

12:10-12:20 Vuledzani ICNAA2022/C05 Iterated Function System of Generalized Cyclic Contractions in Partial Metric Spaces  
Makhoshi

12:20 - 12:30 Usha Bag ICNAA2022/C06 Orbitally p-implicit R-contractive mapping and applications to nonlinear matrix equations and integral equations

12:30-12:40 Kavita Sakure ICNAA2022/C07 Approximating fixed point of a general class of nonexpansive mappings in hyperbolic spaces

12:40-12:50 Hitesh Kumar ICNAA2022/C08 Modeling and Analysis of Cancer Treatment with Oncolytic Virotherapy using Delay  
Singh

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**Parallel Session 1D [ ZOOM Link: <https://us04web.zoom.us/j/79974135455?pwd=cbsE6lXRJ8av9ILFgZa9qr30qMDaPA.1>  
Meeting ID: 79974135455 Passcode: 102735 ]]**

**Session Chair Prof. H. K. Nashine, VIT, Bhopal, India**

<b>10:30-11:00</b>	<b>Invited talk</b>	<b>Prof. Praveen Agarwal, Anand International College of Engineering, Jaipur, India</b>
<b>11:00-11:30</b>	<b>Invited talk</b>	<b>Prof. Kurunathan Ratnavelu, University of Malaya, Malaysia</b>
11:30-11:40	Ankur Sharmah	ICNAA2022/D23 On some classes of $I^K$ - Frechet Urysohn spaces
11:40-11:50	Aynur Keskin Kaymakci	ICNAA2022/D02 MbK-open Sets
11:50-12:00	Nicky Caroline S.	ICNAA2022/D03 Study of g-centroid in Fuzzy graphs using convex sets.
12:00-12:10	Shahin Nosrat Jogan	ICNAA2022/D04 Fixed Points of Graphic Contractions in b-Metric Spaces with a Directed Graph
12:10-12:20	Juan Eduardo Nápoles Valdes	ICNAA2022/D05 Inequalities of Hermite-Hadamard type with weighted integrals
12:20 - 12:30	Akanksha V. Rane	ICNAA2022/D06 Derivative of the First Eigenvalue of Dirichlet Eigenvalue Problem on Complex Projective Space
12:30-12:40	Jhavi Lal Ghimire	ICNAA2022/D07 On Certain Type of Vector-Valued Difference Sequence Space .... Defined by Orlicz Function
12:40-12:50	Smita Sahu	ICNAA2022/D08 Numerical Investigation of a MHD Micropolar Fluid past a Continuously Moving Plate with Soret and Dufour Effects

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**DAY 2 (23-11-2022)**

**Technical Session II**

**Parallel Session 2A**[**ZOOM Link:** <https://us04web.zoom.us/j/79974135455?pwd=cbsE6lXRJ8av9ILFgZa9qr30qMDaPA.1>

**Meeting ID: 79974135455 Passcode: 102735 ]**

**Session Chair Prof. Anca Croitoru, University “Alexandru Ioan Cuza”, Romania**

<b>9:00-9:30</b>	<b>Invited talk</b>	<b>Prof. Talat Nazir, University of South Africa, South Africa</b>	
9:30-9:40	Amar Deep	ICNAA2022/A09	Solvability for generalized fractional integral equations by fixed point theorem
9:40-9:50	Harindri Chaudhary	ICNAA2022/A10	Hardy-type inequalities for the maximal operator in weighted Lebesgue spaces
9:50-10:00	Shiv Mangal	ICNAA2022/A11	Fractional-order Epidemic Model for the Spread and Control of Dengue Disease
10:00-10:10	Pratik Vijay Lepse	ICNAA2022/A12	Impact of Particle creation in Rastall gravity
10:10-10:20	Ankush Chanda	ICNAA2022/A13	Iterative approximation of common fixed points with simulation results in Banach spaces
10:20 - 10:30	Jenisha Linnet E	ICNAA2022/A14	Solutions of higher-order fractional differential equations in Riesz space with anti-periodic boundary conditions
10:30-10:40	Rajni Mahor	ICNAA2022/A15	Effect of prey and predator dispersal rates on a discrete-time population model
<b>BREAK</b>			
10:50-11:00	Charu Batra	ICNAA2022/A16	New Modified Inertial Krasnoselski -Mann Type Iterative Method For Solving Split Generalized Mixed Equilibrium Problem And Hierarchical Fixed Point Problems
11:00-11:10	Md Nazir Hussain	ICNAA2022/A17	Intuitionistic Fuzzy Aspects of Distributive N-groups".
11:10 - 11:20	Rajender Kumar	ICNAA2022/A18	The Deterministic Inventory Model with Exponential Increasing Demand, Variable Deterioration and Partial Backlogging
11:20 - 11:30	Shraddha Rajput	ICNAA2022/A19	Fixed Point Theorem for Weak B-Contraction in Bipolar Controlled Fuzzy Metric Spaces with Applications.
11:30 - 11:40	Pooja Soni	ICNAA2022/A20	An Inventory Model for Deteriorating Items with Demand depends upon time for Partial Backlogging
11:30 - 11:40	Gursimran Kaur	ICNAA2022/A21	Rough Delta- Statistical Convergence of Order $\alpha$ of Generalized Difference Sequences on Probabilistic Normed Spaces
11:40 - 11:50	Monika Masta	ICNAA2022/A22	Fixed point theorems in fuzzy metric space
11:50 – 12:00	Gabriela Apreutesei	ICNAA2022/D01	Topologies on some nonlinear spaces of multifunctions

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**Parallel Session 2B [ZOOM Link: <https://us02web.zoom.us/j/82213570339?pwd=dC9ZQzFBUCswSFYxeDhPVndQZ2FYUT09>**

**Meeting ID: 822 1357 0339 Passcode: 599019]**

**Session Chair Prof. Francisco Javier Mendoza-Torres, Benemérita Universidad Autónoma de Puebla, Mexico**

**9:00-9:30 Invited talk Prof. H. K. Nashine, VIT, Bhopal, India**

9:30-9:40 Ravina Shokeen ICNAA2022/B09 Primal hybrid method for quasilinear parabolic problems

9:40-9:50 Dovine Dukru ICNAA2022/B10 A numerical study of heat and mass transfer for casson fluid over a stretching sheet

9:50-10:00 Paltu Halder ICNAA2022/B11 Dust–ion acoustic solitary waves in a collisionless magnetized five components plasma

10:00-10:10 Kalu Ram Sharma ICNAA2022/B12 An Unsteady MHD Williamson fluid flows in a vertical porous channel with porous media and thermal radiation

10:10-10:20 Isil Acik Demirci ICNAA2022/B13 On Generalized Statistical Convergence Of Sequences Via Ideals In G-Metric Spaces

10:20 - 10:30 Nikhil Khanna ICNAA2022/B14 Some new generalizations of wavelets

10:30-10:40 Jethaloja Urvashi ICNAA2022/B15 Topology in image segmentation  
Lakhamanbhai

**BREAK**

10:50-11:00 Shashi Thakur ICNAA2022/B16 Common fixed-point theorem for Geraghty type generalized C-class functions in partial metric spaces

11:00-11:10 Limainla Kichu ICNAA2022/B17 Finding Correlation of Fuzzy Data

11:10 - 11:20 Anandika Swain ICNAA2022/B18 Artificial Intelligence in Medicines

11:20 - 11:30 Rahul jha ICNAA2022/B19 Statistical Analysis of online knowledge sharing of air travelers

11:30 - 11:40 Anil Kumar ICNAA2022/B20 Effect of Non-uniform Heat Source on Unsteady Mixed Convective Flow of Williamson Fluid in the Presence of Inclined MHD  
Gupta

11:40 - 11:50 Vinay Kumar ICNAA2022/B21 An Efficient Linear Regression Type Estimators Utilizing The Known Conventional Location Parameters In Sampling Theory  
Yadav

11:50 - 12:00 Sushil Shukla ICNAA2022/B22 On Hopf Light like Hypersurfaces of Indefinite Kenmotsu Manifold

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**Parallel Session 2C [ZOOM Link: <https://zoom.us/j/91551550367?pwd=Mml0ek5NY2hXaUhLOWNYcTMvOTV4Zz09>  
Meeting ID: 915 5155 0367 Passcode: 835244]**

Session Chair	Prof. Mohammad Sajid, Qassim University, Saudi Arabia		
<b>9:00-9:30</b>	<b>Invited talk</b>	<b>Prof. Ekrem Savas, Usak University, Usak-Turkey.</b>	
9:30-9:40	Ritanjali Mohanty	ICNAA2022/C09	On the Generalized Pell (k,i)- sequences with some identities
9:40-9:50	Pratibha Verma	ICNAA2022/C10	Analysis and solution of complex order differential equations using singular kernel
9:50-10:00	Anil kumar	ICNAA2022/C11	Applications of differential transform and Bell polynomials to various types of differential equations
10:00-10:10	Sourav Halder	ICNAA2022/C12	The fourth-order nonlinear evolution equation for application to deep water capillary-gravity waves including the effect of wind flow
10:10-10:20	Hitesh Kumar Singh	ICNAA2022/C13	Analysis of the Chickenpox Disease Evolution in an MSEIR Model using Fractal-Fractional Differential Operator
10:20 - 10:30	Aradhana Bandekar	ICNAA2022/C14	On hyperbolic stability of retarded differential equations
10:30-10:40	Akshey Akshey	ICNAA2022/C15	A novel analytical iterative approach to time-fractional Vibration equation using Aboodh transform
<b>BREAK</b>			
10:50-11:00	Thenmozhi D	ICNAA2022/C16	The stability investigation of paired solutions of Ti-Alloy nanofluids presence of MHD and Joule effects through a porous medium
11:00-11:10	Devangi Sojitra	ICNAA2022/C17	Pretopological Spaces and their Properties
11:10 - 11:20	Jyoti Yadav	ICNAA2022/C18	Application of elzaki transform with variational iteration method to nonlinear partial differential equations
11:20 - 11:30	Tazmin Sultana	ICNAA2022/C19	Anisotropic Polytropic Gas Model
11:30 - 11:40	Palky Handique	ICNAA2022/C20	Development of thin Casson liquid film over an unsteady nonlinear stretching sheet
11:30 - 11:40	Nilufar Mana Begum	ICNAA2022/C21	Generating functions and congruences for some color partition function
11:40 - 11:50	Sunder Deep	ICNAA2022/C21	Recovery of Block Sparse Signals from Non-Uniform Finite Wavelet Frame Transform
11:50 – 12:00	Pankaj	ICNAA2022/C22	Common Fixed point Results in Extended Bipolar b-Metric Spaces
12:00 – 12:10	M. Siva Sankari		Computational Investigation of Biocovection and Activation Energy in MHD Casson

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and Maxwell flows across a preamble sheet.

**Parallel Session 2D [ZOOM Link: <https://zoom.us/j/95676262994?pwd=OHhKN05BMFBZQWRTeTNHdURqVEpTUT09>  
Meeting ID: 956 7626 2994 Passcode: 351905]**

**Session Chair Prof. Juan H. Arredondo, Universidad Autónoma Metropolitana, Mexico**

**9:00-9:30 Special Lecture Dr. Bapan Ghosh, Indian Institute of Technology Indore, India**

9:30-9:40	Dibjyoti Mondal	ICNAA2022/D09	Study on Electroosmotic Transport of Peristaltic flow in Microchannel
9:40-9:50	Kushal M	ICNAA2022/D10	Comparison of aerodynamic coefficients of Tall tapered square building with corner modified with Golden spiral
9:50-10:00	Parthkumar P. Sartanpara	ICNAA2022/D11	Comparative study of two novel analytical methods to fractional Navier-Stokes equation
10:00-10:10	N. Maheshbabu	ICNAA2022/D12	Williamson fluid flow over a porous medium past an exponentially stretching sheet with the influence of activation energy
10:10-10:20	Binandita Barman	ICNAA2022/D13	Multiple dynamics in a delayed predator-prey model with asymmetric functional and numerical responses
10:20 - 10:30	Ajay Kumar	ICNAA2022/D14	Solving time-fractional differential equations using q-homotopy analysis method along with Shehu transform
10:30-10:40	Ruhul Kuddus Ahmed	ICNAA2022/D15	Mathematical Modelling of non-Newtonian flow of Mandarin Juice over a moving permeable sheet with slip and heat generation
<b>BREAK</b>			
10:50-11:00	Hem Raj Pandey	ICNAA2022/D16	Epidemic model for Dengue Disease Transmission Dynamic in Nepal by Caputo Derivative of Fractional Order
11:00-11:10	Atul Kumar	ICNAA2022/D17	Mathematical Model of Dynamical System for Piecewise Derivatives
11:10 - 11:20	Ramdas Sonawane	ICNAA2022/D18	Gradient optimal control of the Bilinear Time fractional Reaction-diffusion equation
11:20 - 11:30	Ruchi Bhardwaj	ICNAA2022/D19	Frames as Operator Orbits in Quaternionic Hilbert spaces
11:30 - 11:40	Vishalkumar Jayantibhai Prajapati	ICNAA2022/D20	A novel hybrid approach to solve non-linear fractional partial differential equations via new integral transform
11:40 - 11:50	Shivangi Upadhyay	ICNAA2022/D21	Geometry and application in economics of fixed point in partial metric space
11:50 – 12:00	Nitin Sharma	ICNAA2022/D22	K-Fusion Frames in Quaternionic Hilbert Spaces

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Valedictory

12:10 – 12:25 **ZOOM Link:** <https://zoom.us/j/91551550367?pwd=Mml0ek5NY2hXaUhLOWNYcTMvOTV4Zz09>

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