

Report on Two-Days “International Conference on Advances in Mathematical Sciences Scientific Computing And Its Applications” IC- AMSCA-2024 under DBT- Star College Scheme.

Event:Two-Day International Conference on Advances in Mathematical Sciences, Scientific Computing, and its Applications

Date:22- 23 March, 2024.

Venue:Auditorium, Centre of Excellence Govt. CollegeSanjauli, Shimla-6.

Introduction:

The two days International Conference on Advances in Mathematical Sciences Scientific Computing And Its Applications was organized by the Department of Mathematics, Centre of Excellence Govt. College Sanjauli, Shimla-6 on dated 22-23 March 2024 under DBT- Star College Scheme. The main aim of this conference IC-AMSCA-2024, is set to serve as a global forum for scientists, researchers and educators, facilitating the presentations and discussions of mathematical sciences. Many disciplines of physical sciences, social sciences and engineering are becoming increasingly infused in development and applications of mathematics, which help to describe real world problem into mathematical problem and interpreting the solution in the language of real world. The objective of the conference is to focus on covering the eminent experts in all branches of mathematical sciences, scientific computing to common platform. The deliberations of the conference include the invited lectures by eminent mathematicians/ Scholars from India as well as abroad and research paper presentations by the faculties of various universities, technical educational institutions and young researchers from different universities. The event commenced with an inaugural session presided over by esteemed dignitaries, including Chief Guest Dr .DevshishGoshal, Professor at JNU New Delhi, Keynote speaker Dr Riddhi Shah, Professor JNU New Delhi and other invited speakers Dr R P Sharma , Dr Rajesh Sharma professor HP University Shimla, Dr Mandeep Singh Professor SLIET Panjab, Dr Dinesh Khurana and Dr AnjanaKhurana from Panjab University, Dr Harpreet Singh, Professor Bharti Bhagra, Principal of the institute. The ceremony began with the traditional lamp lighting ceremony, symbolizing the enlightenment and dissemination of knowledge.

Event Highlights:



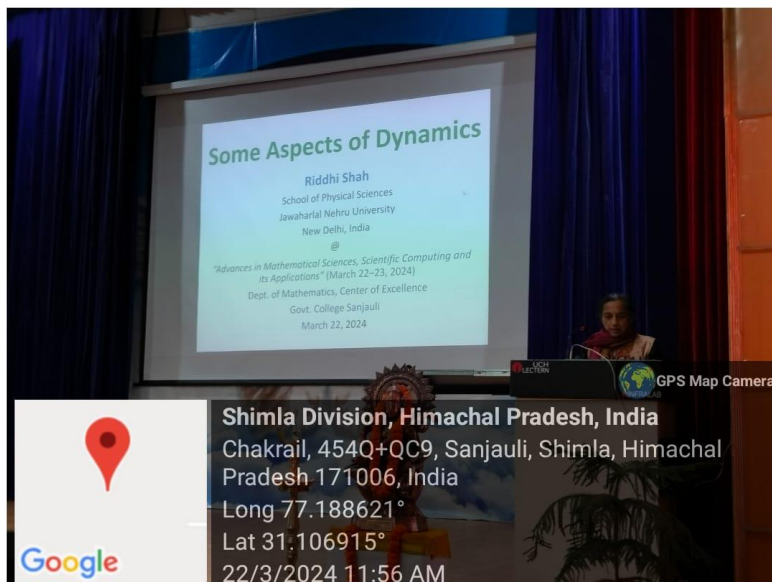
- **Inaugural Function:**
- **Patron of Conference address:** Professor Bharti Bhagra, Patron of this International conference and Principal of this prestigious college extended a warm welcome to all invited Speakers, guests, teachers/researchers, participants from different parts of country, attendees and officially inaugurated the conference. The Department of Mathematics felicitated the distinguished guests and speakers with

mementos, rosettes, and token of appreciation, acknowledging their invaluable contributions to their concerned fields.

- **Address by Conference Convenor** : Dr. Girish Kapoor, Head of the Mathematics Department and convener of this conference, delivered an welcome address by expressing gratitude to the chief guest, keynote speaker and other esteemed speakers, participants from different part of the country for gracing the occasion with their presence.
- **Chief Guest Address: Dr Devashish Ghoshal, Professor at School of Physical Sciences, JNU highlighted the importance of mathematics in this world of Science and Technology and its role in other physical sciences with its applications.**

science and Technology and its role in other physical sciences with its applications.

Keynote Address by Dr. Ridhi Shah Professor of Mathematics at School of Physical Sciences: The conference commenced with a captivating keynote address by Dr. Ridhi Shah, Professor at Jawaharlal Nehru University, New Delhi. She presented her paper on "Some Aspects of Dynamics," where she introduced dynamical systems with few examples and provided an overview of distal maps, which were introduced by David Hilbert. She mentioned a couple of results on the behaviour of orbits of distal automorphisms on locally compact groups and discussed about the dynamics of billiards, a related illumination problem. The talk was very informative.



- **Invited Talk-1, by Dr. R.P. Sharma:** Dr. R.P. Sharma (former professor HPU) delivered a thought-provoking presentation on "Exploring the Historical Legacy of Ancient Bharat's Mathematical Innovations." He delved into ancient mathematical texts such as the Sulbh-Sutr and KatyayanSutr, shedding light on their significance and contributions to mathematical knowledge. This session was chaired by Dr. Madhu Dadwal, from Department of Mathematics, HP University Shimla.
- **Invited Talk- 2 by Dr. Dinesh Khurana:** Dr. Dinesh Khurana, Professor of the Department of Mathematics at Panjab University, Chandigarh, presented his paper on "Rings which are Matrix Rings." He elucidated concepts such as the commutativity of rings, Danchev and Lam properties, and the strengthening of Fuchs-Lam theory, offering valuable insights into ring theory. The session was chaired by Dr. Pawankumar Sharma, from Department of Mathematics & Scientific Computing, National Institute of Technology, Hamirpur.

- **Invited Talk- 3 by Dr Rajesh Sharma: Third invited talk was presented by Dr Rajesh Sharma Professor at the Department of Mathematics, HP University Shimla**

Conclusion:The pre-lunch session of the international conference was not only insightful but also captivating, with each speaker offering unique perspectives and contributions to the field of mathematics. The diverse range of topics were discussed, coupled with the expertise of the speakers, set the tone for an enriching and intellectually stimulating event.

Report Writing of Afternoon Session

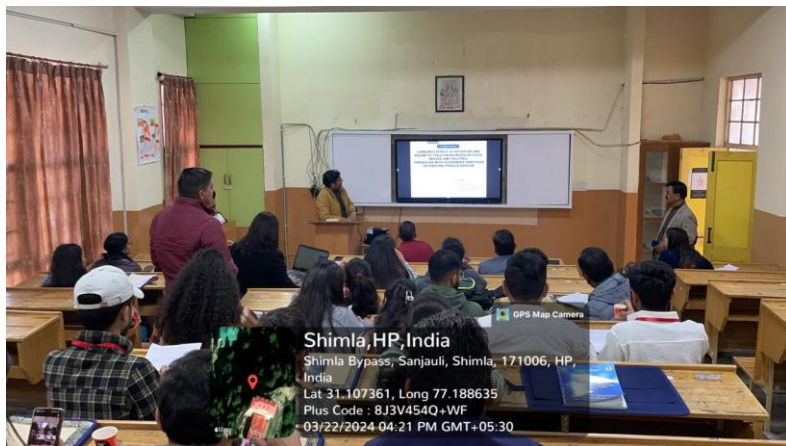
Afternoon session started after lunch with the Invited talk at college auditorium.

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“On some Non commutative Versions of Cauchy-schwarz Inequalities in Matrix Algebra” by Dr Rajesh Kumar Sharma (Professor of Mathematics) at H P. University Summer Hill Shimla-5. He discussed about Cauchy’s inequality in 1821 which is derived by inequality using Lagrangian Identity. He also talked about Cauchy’s inequality in matrix algebra followed by Positive linear functional, positive linear functional in maps, Kadison inequality (1952), Choi Inequality (1974). He also explained different theorems of inequality in 1997 and much more till Bhatia and Sharma in 2016. The session concluded with vote of thanks by Chairman of this session Dr Mandeep Singh, Professor at SantLongowal Institute of Engineering and Technology, Lonowal, Sangrur Panjab.

This was followed by Technical Parallel sessions which were held simultaneously in different lecture Theatres.

Report Writing Technical Session 1, venue- BLT:-



Technical Session was Chaired by Dr VikramKapil of Govt. College Ghumarwin and co-chaired by Dr Arun Kumar of Govt. College Amb. There was total fourteen presenters in this session. The name of the presenters along with their title are as:

1. SOME CONTRIBUTION TO VEDIC MATHEMATICS

by **Hitendra Kumar**, P. Dave Associate Professor Of Statistics & Convenor of Certificate Course in Vedic Mathematics, B. J. VanijyaMahavidyalaya, VallabhVidyanaga, Gujarat.

2. RELATION BETWEEN OPERATOR MONOTONE FUNCTIONS AND CND FUNCTIONS AND THEIR APPLICATIONS

By **Dr.Rajinder Pal** Assistant Professor, Mata Gujri College, Fatehgarh Sahib. Punjab

3 .EFFECT OF ROTATION AND MAGNETIC FIELD ON MICROPOLAR FLUID HEATED AND SOLUTED, PERMEATED WITH SUSPENDED PARTICLES SATURATING POROUS MEDIUMby **Sumit Gupta** Department of Mathematics, Rajiv Gandhi Govt. Degree College ChauraMaidan, Shimla, India

4. STATIONARY CONVECTION IN THE THERMAL INSTABILITY OF NON-NEWTONIAN FLUID: FREE-FREE, RIGID-RIGID AND RIGID-FREE BOUNDARY CONDITIONSby **Ajit Kumar** Associate Professor, Department of Mathematics & Statistics, Himachal Pradesh University, Shimla.

5. AN OVERVIEW OF BINARY LINEAR CODES IN INFORMATION THEORY

By **Satish Kumar**Department of Mathematics,Govt. College Solan (H.P)

6 ANALYSIS OF FREE VIBRATIONS IN AN ISOTROPIC NONLOCAL ELASTIC HOLLOW CYLINDER WITH DOUBLE POROSITY

By **NishaRana**PhD Research Scholar, MAU21DMA003Maharaja Agrasen University, Atal ShikshaKunj, Baddi, Solan.

7. ON UPPER LIMITS TO THE COMPLEX GROWTH RATE IN MULTICOMPONENT CONVECTION IN A SPARSELY DISTRIBUTED POROUS MEDIUM

By **ChitreshKumari, Jitender Kumar, Harjinder Singh and Jyoti Prakash**Research Scholar, Deptt. of Mathematics and Statistics HPU, Summerhill, Shimla.

8 SET OF THERMAL CONVECTION USING A JEFFREY NANOFLUID LAYER UNDER THREE DISTINCT BOUNDARY CONDITIONS

By **Praveen Lata**Research Scholar, Department of Mathematics & Statistics,Himachal Pradesh University, Shimla, IndiaEmail: praveenlata5@gmail.com

9. COMMUTATIVE BEZOUT PRIME MAXIMAL (PM) DOMAIN IN SEMIRINGS

By **Tanvi Sharma, Parul Bansal, Gunjan Amit Sharma, Chirag and Paras Chauhan** Department of MathematicsHimachal Pradesh University Regional Centre,Dharamshala, Himachal Pradesh (INDIA) Gmail: trpangotra@gmail.com

10. SOME NEW CLASSES OF PERMUTATION TRINOMIALS OVER $F_{(3^{2m})}$

By **SagarVinayak** Department of Mathematics &Statistics Himachal Pradesh University, Shimla, India -171005 Email: shalini.garga1970@gmail.com

11. ELEMENTARY DIVISOR SEMIRINGS

By **KanuPriya, Rupanshi, IshaChandel, Vanshika, Badal Singh and Abhishek**, Department of Mathematics Himachal Pradesh University Regional Centre, Dharamshala, Himachal Pradesh (INDIA) Email: trpangotra@gmail.com.

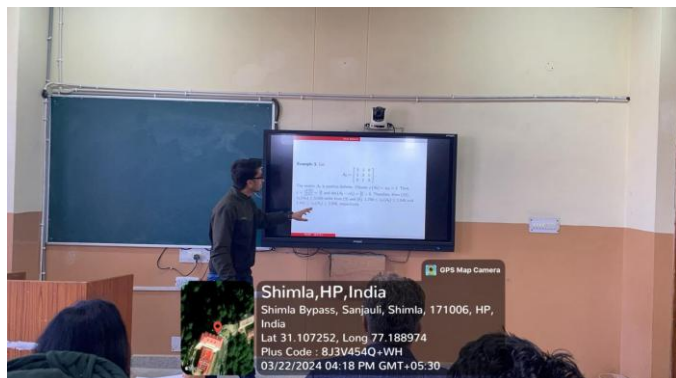
12. HOLOGRAPHIC DARK ENERGY WITH GRANDA-OLIVEROS CUTOFF IN BRANS-DICKE THEORY by **Kirti Mehta** MAU21DMA001 Research Scholar, Department of Mathematics, Maharaja Agrasen University, Solan, H.P -174103.

13. Physicochemical analysis of Honey of temperate regions of H.P.
By **Shivani Keprate**, Research Scholar HPU Summer Hill Shimla .

14. EXPLORING SERRE'S CONJECTURE: RECENT ADVANCES AND NEW PERSPECTIVES By **Gopal Sharma**, Research Scholar School of Mathematical and Statistical Science Indian Institute of Technology, Mandi, Email: gopalsharmasml@gmail.com

The Session concluded with Vote of thanks to the Chairman Dr Vikram Kapil and co chairman by Dr Arun Kumar of this session by DR Shweta Sharma, Assistant Professor Zoology, COE -GC Sanjauli Shimla-6.

Technical Session-2, venue-PLT:-



The session begins with the introduction of chairperson to the participants. A total of six papers were presented in the session.

Mr. Vijay Kumar, Research Scholar, Deptt. of Mathematics & Statistics, Himachal Pradesh University delivered his talk on **Second Extreme Eigen values of Hermitian Matrices** where he discussed real symmetric matrix.

Second deliberation was made by **Balkaran Singh**, Department of Mathematics & Statistics, Himachal Pradesh University, Shimla on an **Irreducibility Criterion for Polynomials over Finite Fields** where the presenter discussed Irreducible polynomials in detail.

Manpreet Singh from Department of Mathematics & Statistics, Himachal Pradesh University delivered his talk on **Construction of Novel Classes of Permutation Binomials and Trinomials over F_{2^k}** .

Exploring Rhotrix Modules: Insights and Observation was another talk of the session where a research scholar Shalini from Department of Mathematics & Statistics, Himachal Pradesh University explained in detail the rhotrix and three dimensional rhotrix.

Babita Kumari from Department of Mathematics, Government College of Teacher Education Dharamshala presented a paper on **Analysis of Thermoelastic Vibrations of a Nonlocal Micro/Nano Scale Beam with Voids Via Three Phase Lag Model**.

Another presentation was made by Ms. Geeta from Department of Mathematics & Statistics, Himachal Pradesh University on **Z- Derivations of Additively Inverse Semirings**.

The session was chaired by the Dr.MadhuDadhwal, Assistant professor,Department of Mathematics & Statistics, Himachal Pradesh University Shimla.

Technical Session -3, venue-CLT:-



Technical Session Overview:

The session was chaired by Dr.Pawan Kumar Sharma, a distinguished faculty member from NIT Hamirpur and co-chaired by Dr MadhuDadhwal from department of Mathematics HP University Shimla.

Paper Presenter with Topics:

1 . Nitish Thakur (Himachal Pradesh University Summer Hill, Shimla):*

Topic: Hybrid Authentic Image Inscription Scheme Using Elliptical Curve for Enhanced Security.

2 . Rajinder Kaur (Punjab University, Patiala, Punjab).

Topic: Geometry of Screen Semi-Invariant Light-Like Submanifolds of a Metallic Semi-Riemannian Manifold Endowed with a Quarter Symmetric Non-Metric Connection.

3 . Shagun (Punjab University, Patiala, Punjab).

Topic: Light-Like Hypersurfaces in an Indefinite Trans-Sasakian Statistical Manifold.

4 . ShaliniChandel (Himachal Pradesh University Summer Hill, Shimla).

Topic: Semi-Baer N-Group and Nearing.

Conclusion:

The contributions presented by each speaker underscored the diverse and dynamic landscape of contemporary mathematical research. Through their insightful presentations, they elucidated complex mathematical concepts, explored novel methodologies, and contributed to the ongoing advancement of mathematical theory and its practical applications.

Online sessions were held in **Conference room and language lab**. The session was chaired by Dr.Tilak Raj from the department of Mathematics Regional Center Dharmshala, and co-chaired by Dr.Yogesh Kumar from Govt. college Solan.



A total of 30 presentations were made.

1. STUDY OF THE NONLINEAR EVOLUTION EQUATIONS AND THEIR APPLICATIONS USING LIE SYMMETRY ANALYSIS

Amit Kumar, Department of Mathematics, Sri Venkateswara College, University of Delhi,

2. MATHEMATICAL STUDY OF RHEOLOGY OF RASPBERRY PUREE THROUGH A CIRCULAR TUBE BY HERSCHEL-BULKLEY FLUID MODEL

Kamal Debnath, Department of Mathematics, The Assam Royal Global University, Guwahati.

3. SORET AND DUFOUR EFFECT ON RADIATING AND VISCOUS DISSIPATING CASSON FLUID PAST A NON-LINEARLY EXPONENTIALLY STRETCHING SHEET IN THE PRESENCE OF VARIABLE MAGNETIC FIELD

Aastha Thakur

Department of Mathematics, Rajiv Gandhi Govt. Degree College Chaura Maidan, Shimla, India

4. MATHEMATICAL MODELLING OF IMPACT OF ALCOHOL AND SMOKING ON CARDIOVASCULAR DISEASES

Bapan Kalita and Ananya Shilpi, Department of Mathematics, The Assam Royal Global University, Assam,

5. COMPACT ASTROPHYSICAL OBJECTS WITH A GENERALISED CHAPLYGIN EQUATION OF STATE

Bhavesh Suthar, B. S. Ratanpal

Department of Applied Mathematics, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat

6. MHD CASSON FLUID FLOW PAST VERTICAL PLATE WITH RAMPED SURFACE CONCENTRATION AND PARABOLIC MOTION

Akhil Mittal

Government Science College Santrampur, Gujarat.

7. ON THE PRINCIPLE OF THE EXCHANGE OF STABILITIES IN MULTICOMPONENT CONVECTION IN POROUS MEDIUM USING DARCY-BRINKMAN MODEL

by **Jitender Kumar**,

Research Scholar, Deptt. of Mathematics and Statistics, HPU, Summerhill, Shimla.

8 MATHEMATICAL MODEL FOR NANOFUID FLOW PAST AN OSCILLATING VERTICAL PLATE CONSIDERING MAGNETIC FIELD AND RADIATION

V. A. Kori, Shri Govind Guru University, Vinzol, Godhra, Gujarat

9 ON COMMUTING GRAPH OF AFFINE GROUP $AFF(1, Z_p)$ Surendra Kumar Mishra

W.R.S. Govt. Degree College Dehri, Kangra HP India.

10 STUDY OF NON-LINEAR STABILITY IN THE RESTRICTED THREE-BODY CONFIGURATION WITH HETEROGENEOUS BODY AND FINITE-STRAIGHT SEGMENT

Bhawna Singh Research Scholar, Department of Mathematics, University of Delhi

11 IN THE CONTEXT OF THE FUZZY SETS : IDEAS CONCEPTS AND SOME REMARKS ON THE HISTORY AND TRENDS OF DEVELOPMENT

Dr. Sonia Rani Assistant professor Tika Ram Girls college, Sonapat

12 COMPARATIVE STUDY OF MHD AND WITHOUT MHD ON UNSTEADY FLOW WITH SLIP CONDITION AND MASS TRANSFER EFFECT

Dr. Anuja Sinha Assistant Professor Mathematics Department, The Assam Royal Global University

13 EFFECT OF VARIABLE GRAVITY ON THERMAL CONVECTION IN JEFFREY NANOFUID WITH ANISOTROPIC POROUS MEDIUM

Deepak Bains Department of Mathematics & Statistics, Himachal Pradesh University, Summer Hill

14 MACHINE LEARNING ALGORITHMS: A REVIEW

Bharti Mahajan Department of Computer Science, Himachal Pradesh University, Shimla,

15 EXPLORING VARIABLE DENSITY EFFECT ON THE STRESSES OF ISOTROPIC ROTATING DISK BY USING TRANSITION THEORY AND GENERALIZED STRAIN MEASURES

Naresh Kumar Department of Mathematics, Govt. College, Nalagarh, Himachal Pradesh, India

16 THE ROLE OF MATHEMATICS IN ADVANCING PHYSICAL SCIENCES

Satish Kumar Associate Professor (Physics) Govt. College Jhandutta Distt. Bilaspur (H.P.)

17 SOME MORE BOUNDS FOR EIGENVALUES INVOLVING ENTRIES OF HERMITIAN MATRICES.

Manish Pal Assistant Professor, Department of Mathematics
Atal Bihari Vajpayee Govt Degree College Sunni, Shimla

18 NOVEL PYTHAGOREAN FUZZY ENTROPY MEASURE FOR OPTIMAL PROJECT SELECTION USING VIKOR METHOD

Palvinder Thakur, Neeraj Gandotra, Namita Saini

Yogananda School of AI, Computer & Data Sciences, Shoolini University, Solan (H.P.), India

19 THERMOELASTICITY AND MASS DIFFUSION INTERACTION IN HALF-SPACE BASED ON MOORE GIBSON THOMPSON THEORY

Rozy Sharma & P.K. Sharma Department of Mathematics & Scientific Computing,
National Institute of Technology Hamirpur, (H.P.)-177005, India

**20 EXPLORING MULTI-CRITERIA DECISION MAKING METHODS FOR PYTHAGOREAN FUZZY SETS:
A COMPREHENSIVE REVIEW**

Sahil Kashyap, Neeraj Gandotra, Namita Saini

Yogananda School of AI, Computer and Data Sciences, Shoolini University, Solan, Himachal Pradesh,

21. APPLICATIONS OF MATRICES

Prof. Vandana Kansal

Assistant Professor, Govt. Degree College Paonta Sahib

22. ON A CLASS OF SELF-ORTHOGONAL AND MDS LEE DISTANCE CODES OVER FINITE RINGS

Ashish Bamta

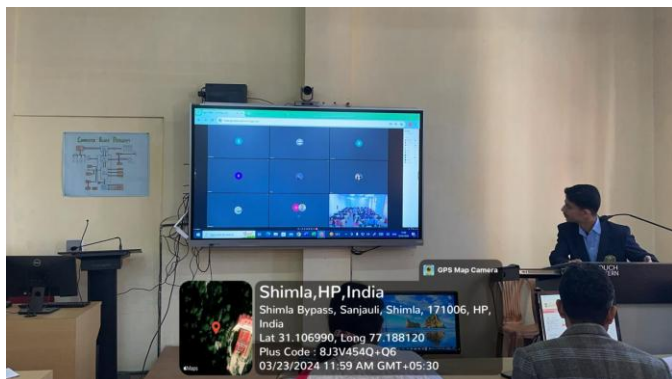
Department of Mathematics

Government College Nagrota Surian, Bantungli, Kangra

Report on Pre-Lunch Session of Two-Day International Conference

Dated: 22.03.2024

Venue: Computer Science Lab



The session was chaired by Prof. Rakesh Kumar HOD, Department of Mathematics Central University HP and co-chaired by Dr.Minakshi Sharma Dept. of Zoology GC Sanjauli.

1 DISTINGUISHING LABELLING FOR THE DIRECT PRODUCT ACTION

Pankaj Department of Mathematics, Govt. College Chamba

2 STABILITY ANALYSIS OF DOUBLE-DIFFUSIVE CONVECTION PROBLEMS COUPLED WITH CROSS-DIFFUSIONS

Dr.SunitaKumari Assistant Professor (Mathematics) J.N.Govt.Engg.College, Sundernagar

3 UNLOCKING COMPUTATIONAL EFFICIENCY: EXPLORING VEDIC MATHEMATICS AND ITS INTEGRATION INTO COMPUTER SCIENCE

Anil Kumar Assistant Professor of Mathematics, W.R.S Govt. College Dehri, Kangra (H.P),

4 ADVANCEMENTS IN CODING THEORY: A COMPREHENSIVE REVIEW

SomKrishan Sharma Associate Professor Mathematics, Govt. College Kullu, Distt. Kullu (HP)

5 TEMPERATURE DISTRIBUTION IN OUTER LAYERS OF HUMAN BODY WITH UNIFORMLY PERFUSED TUMOR: FINITE ELEMENT METHOD BASED STUDY

Rajesh Singh Department of Mathematics, JLN Govt. Degree College Haripur, (Manali) Distt. Kullu (H.P.) India.

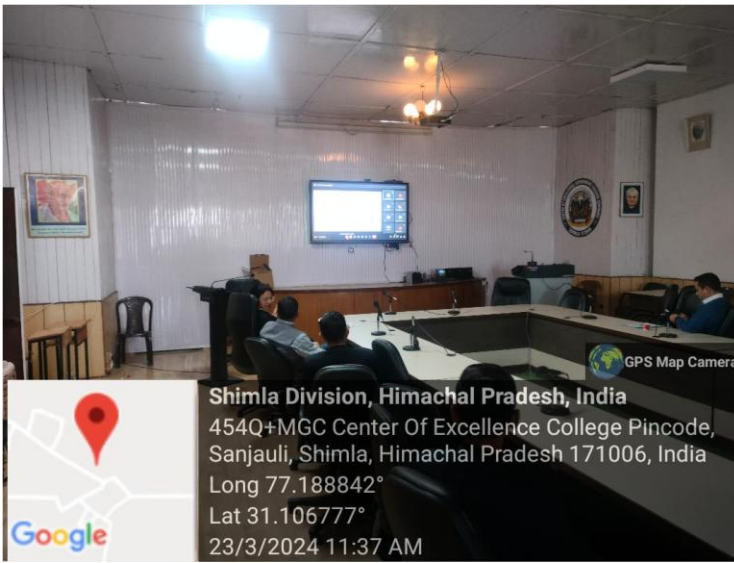
6 A WORK ON TROPICAL SUBALGEBRA OF A GIVEN TROPICAL ALGEBRA FOR NOISE REMOVAL AND OPTIMAL CONTROL

Manish and Meenakshi SrinivasaRamanujan Department of Mathematics,
Central University of Himachal Pradesh, Dharamshala, ShahpurParisar, Shahpur-176206, India

7 EXAMINING WAVELET SOLUTIONS FOR EIGHTH ORDER DIFFERENTIAL EQUATIONS

ShivaniAeri, and Rakesh Kumar SrinivasaRamanujan Department of Mathematics,
Central University of Himachal Pradesh, Shahpur Campus, Shahpur 176206, H.P., India

Venue: Conference Room



The session was chaired by Dr. PushpLata Sharma Associate Professor Department of Mathematics and Statistics HPU and co-chaired by Dr. Ramesh Kumar

1 IMPROVEMENT OF SMART CARD-BASED PASSWORD AUTHENTICATION PROTOCOL FOR TELECARE MEDICAL INFORMATION SYSTEM

Ritika Thakur, Meenakshi Thakur SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh, Shahpur

2 THERMOELASTIC RESPONSE OF AXISYMMETRIC PLATE WITH CONDUCTING LIQUID

Shweta Pathania Department of Mathematics, Himachal Pradesh University Regional Centre, Dharamshala, H.P.-176218, India

3 INVESTIGATION OF ROTATING MAGNETIC NANOFLUID FLOW ON A VERTICALLY MOVING DISK WITH VARIABLE THERMAL CONDUCTIVITY

Kuldeep Singh and Rakesh Kumar SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh, Shahpur Parisar, Shahpur 176206, India

4 CONVECTIVE INSTABILITY IN A HOT FERROFLUID LAYER WITH PERMEABLE BOUNDARIES UNDER THE EFFECT OF MAGNETIC FIELD DEPENDENT VISCOSITY

Mandeep Kaur, Pankaj Kumar SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh Dharmshala (176215), India

5 WHEAT YIELD PREDICTION USING MACHINE LEARNING IN PUNJAB REGION

Anurag Dhiman and Pankaj Kumar SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh, Shahpur Campus, Shahpur 176206, H.P., India

6 MODELLING OF TYPHOID FEVER DISEASE WITH NONLINEAR INCIDENCE RATE

Lakshita Sharma, and Rakesh Kumar SrinivasaRamanujan Department of Mathematics,
Central University of Himachal Pradesh, Shahpur Campus, Shahpur 176206, H.P., India

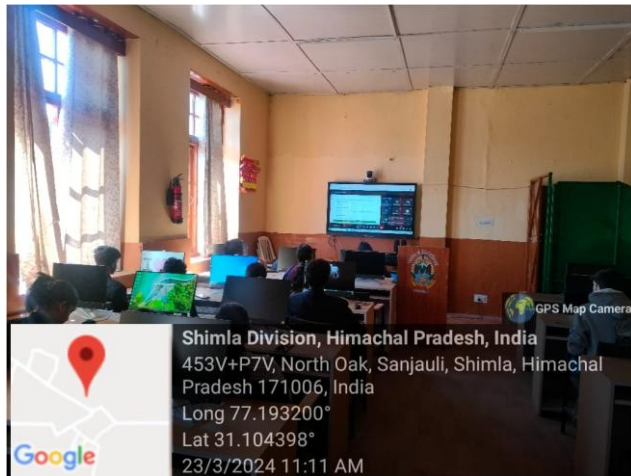
7 ON UPPER BOUNDS FOR THE COMPLEX GROWTH RATE OF PERTURBATIONS IN MAXWELL FERROCONVECTION IN SPARSELY POROUS MEDIUM

DikshaKumari, Abhishek Thakur, Pankaj kumarDepartment of Mathematics, Central University of Himachal Pradesh, Dharamshala (176215), India

8 EFFECT OF MAGNETIC FIELD DEPENDENT VISCOSITY ON FERROCONVECTION IN A POROUS MEDIUM WITH PERMEABLE BOUNDARIES

Pankaj Kumar and Abhishek Thakur SrinivasaRamanujan Department of Mathematics,
Central University of Himachal Pradesh, ShahpurParisar, Shahpur (HP), 176206, India.

Venue: Language Lab



The session was chaired by **Dr. Shalini Gupta** Associate Professor Department of Mathematics and Statistics HPU & co-chaired by **Dr. Yogesh Kumar** Associate Professor GDC Solan.

1 IMPACT OF MAGNETIC FIELD ON THE UPPER CONVECTED MAXWELL NANOFUID DUCT FLOW IN A STRATIFIED ENVIRONMENT

AnuBala and Rakesh Kumar SrinivasaRamanujan Department of Mathematics,
Central University of Himachal Pradesh, Shahpur Campus, Dharamshala, India 176206

2 NANOPARTICLE SHAPE EFFECTS ON THE HYBRID NANOFUID FLOW ACROSS THE CONE-DISK CONFIGURATION

Rakesh Kumar SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh, ShahpurParisar, Shahpur-176206, India

3 A SURVEY ON GAUSS–SEIDEL ITERATION METHOD FOR SOLVING ABSOLUTE VALUE EQUATIONS

Sandeep Kumar Saini, Meenakshi Thakur SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh

4 SHORT-TERM TRAFFIC FLOW PREDICTION USING ARTIFICIAL INTELLIGENCE (AI)

Shivali Sharma, Kranti Kumar and Rakesh Kumar SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh, ShahpurParisar, Shahpur 176206, H.P., India

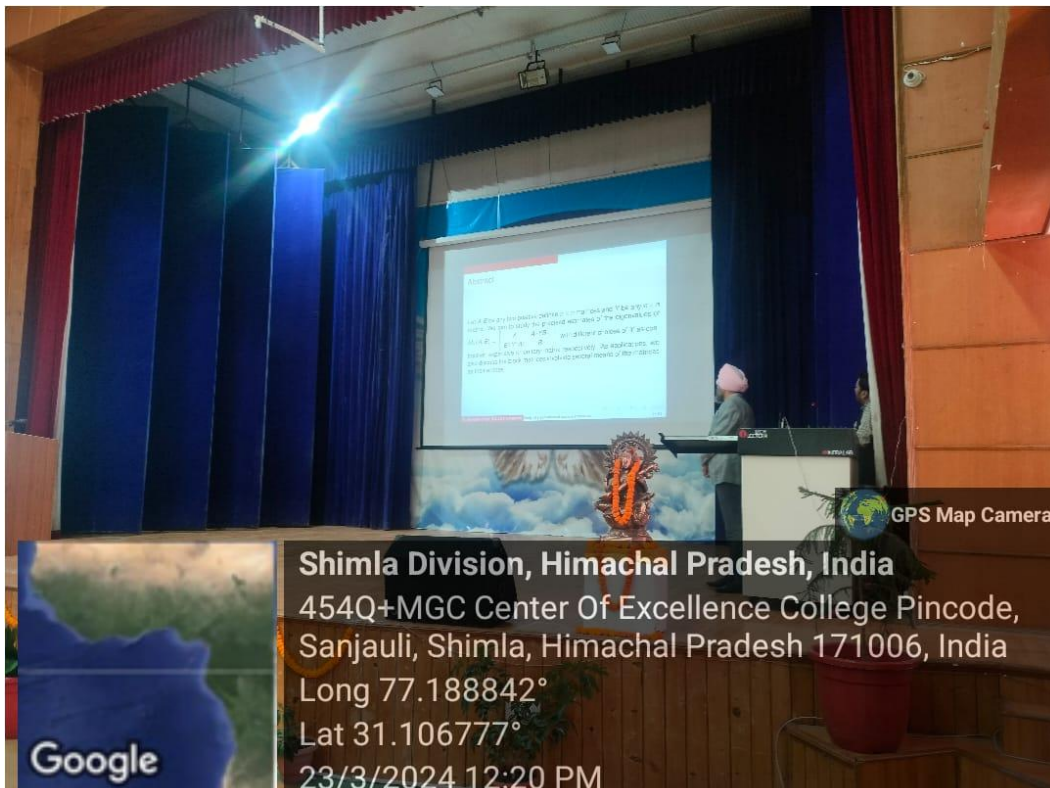
5 AN EXPERIMENTAL EVALUATION OF QUANTUM MACHINE LEARNING ALGORITHM FOR SYMBOL DETECTION WITH NOISY OBSERVATION

Deepak, Sunil Prajapat SrinivasaRamanujan Department of Mathematics, Central University of Himachal Pradesh Dharamsala, 176215, India

Session 2:

The second session of Day 2 of the conference Commenced at 12:00 PM in the college auditorium, featuring presentation by three eminent speakers each contributing to the discourse on diverse topics within mathematics.

Dr.Mandeep Singh's Presentation:

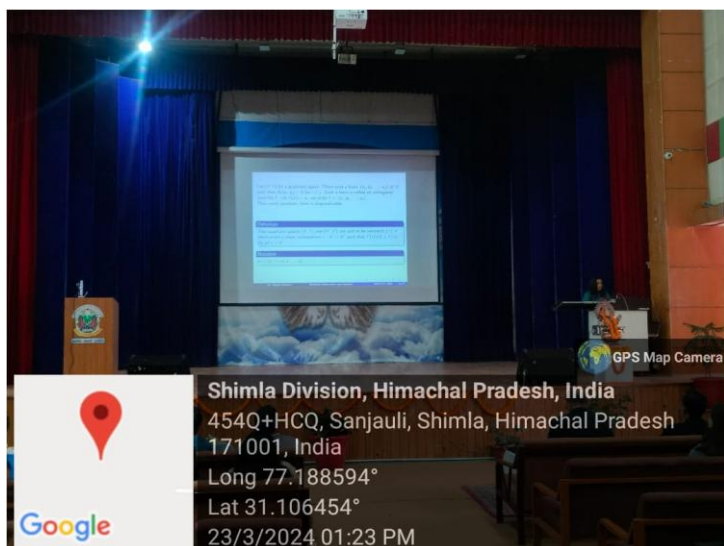


Dr.Mandeep Singh, a Professor in the Department of Mathematics at Saint Longowal Institute of Engineering and Technology, delivered a presentation on "Study of Eigenvalues of Some Matrices via Dilation."

Dr. Singh's articulate delivery and thorough analysis captivated the audience, providing valuable insights into the study of eigenvalues.

The session was Chaired by Dr. Rajesh Kumar, HOD of Mathematics Central University Dharmashala.

Dr.AnjanaKhurana's Presentation:

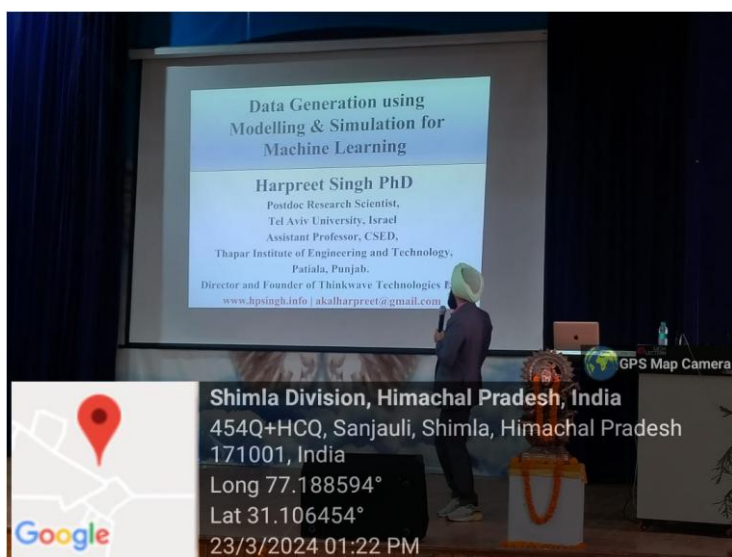


Dr.AnjanaKhurana, presenting her paper on "Quadratic Forms and a New Invariant," demonstrated a profound understanding of the subject matter with her meticulous presentation.

Her eloquence and expertise left a lasting impression on the audience, as she shed light on innovative approaches to quadratic forms.

The session was Chaired by Dr.Pawan Kumar, Professor of Mathematics at NIT Hamirpur.

Dr.Harpreet Singh's Presentation:



Dr.Harpreet Singh, Faculty of Engineering, Tel- Aviv University, Israel, also an Assistant Professor in CSED at Thapar Institute of Engineering and Technology, Patiala, Punjab, presented his paper on "Data Generation using Modeling and Simulation for Machine Learning."

Dr. Singh's friendly and engaging presentation style facilitated a deeper understanding of the complexities of data generation for machine learning applications.

The session was Chaired by Dr.MadhuDadhawal from the Department of Mathematics at HPU.

Prof.(Dr.Surjeet Singh): - Former Professor of Mathematics at King Saud University, Saudi Arabia was the resource person for the evening session. The topic of the session was "Algebra in Mathematics". This session was chaired by Prof. R. P. Sharma. The mode of the session was online through Google Meet due to time difference.

Dr.AradhyaSood's Presentation :- Dr AradhyaSood, Assistant Professor, University of Toronto was the resource person for the lecture “ The Role of Mathematics in Economic Growth. This session was chaired by Dr Rajesh Kumar Sharma from Department of Mathematics H. P. University, Shimla. The mode of this session was also online through Google Meet due to time difference.

Valedictory:-

On 23rd March valedictory stay at 3:30 pm and guest for this event was Dr Rakesh Kumar, professor and H.O.D Mathematics Department at Ramanujan center of Mathematics, central university Dharamshala. Prof Rakesh congratulate the college and Development of Mathematics for successful organisations of two days International Conference. At the end certificates are distributed among participants.

The report on this two conference was presented by prof Anuj Sharma, HOD Department of Physics, Sanjauli college.

At the end end as an organizing secretary of this two days International Conference, Dr Anjana Sharma thanks the Chief guest, Keynote speaker, speakers, participants for making this conference a big success. Dr Anjana Sharma thanked Principal Prof Bharti Bhagra for her continuous encouragement. She also thanked Dr Naresh Verma vice principal, Govt college Sanjauli, Prof Bharti Sharma Dean of Sciences and chairman of this two days conference for their unwavering support throughout the conference. At the end Dr Anjana Sharma thanked the whole staff members and students of Department of Mathematics, organizing committee members of conference for their dedication and support.

- All the sessions were characterized by a high level of intellectual discourse, as each speaker contributed valuable insights and perspectives to their respective fields of study. Participants benefited from the wealth of knowledge shared by the speakers, further enriching the conference experience. Lets hope this conference will foster collaboration and innovation with in the mathematical community in the pursuit of academic Excellence. The conference was concluded with National anthem at the end.