### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

Day 1 : December 27, 2024										
8.00 -	8.45 -	9.20 -	10.20 -	10.50 -	12.00 -	1.00 -	2.30 -	3.30 -	4.00 -	5.10 -
8.45	9.15	10.20	10.50	11.50	1.00	2.30	3.30	4.00	5.00	6.10
Registration	Inauguration	Plenary 1	High Tea	<b>ST 1,2</b>	<b>ST 3,4</b>	Lunch	<b>CT 1-3</b>	Tea	Plenary 2	GBM

Day 2 : December 20, 2024								
9.15 -	10.15 -	10.45 -	11.55 -	12.55 -	2.20 -	3.20 -	3.50 -	5.00 -
10.15	10.45	11.45	12.55	2.20	3.20	3.50	4.50	6.00
Plenary 3	Tea	ST 5.6	ST 7.8	Lunch	ST 9.10	Tea	<b>CT 4-6</b>	Public lecture

Day 2 · December 28 2024

#### Day 3 : December 29, 2024

9.15 –	10.15 –	10.45 –	11.55 -	12.55 –	2.20 - 3.40	3.40 –	4.15 –	5.15 –
10.15	10.45	11.45	12.55	2.20		4.10	5.15	5.45
<b>ST 11, 12</b>	Теа	<b>ST 13, 14</b>	ST 15, 16	Lunch	CT 7 - 10	Теа	Plenary 4	Valedictory

**ST**: *Symposium talk*.

**CT**: *Contributed talk*.

**GBM**: General body meeting

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Plenary / Public Talks**

### Venue: Auditorium, Block I

Talk	Day	Date	Time	Speaker	Title of the talk
Plenary 1	1	27/12/2024	9.20 am – 10.20	Maithilly Ramaswamy	PDE through Fourier Analysis
Chair: E K Narayanan			am	(TIFR - CAM, Bengaluru)	
Plenary 2	1	27/12/2024	4.00 pm – 5.00	Nikita Agarwal	Symbolic Dynamics, Combinatorics on
Chair: Rajeswari Seshadri			pm	(IISER, Bhopal)	Words and Escape Rate
Plenary 3	2	28/12/2024	9.15 am – 10.15	Anish Ghosh	Shrinking targets: geometry, ergodic
Chair: <b>B Sury</b>			am	(TIFR, Mumbai)	theory and number theory
Public	2	28/12/2024	5.00 pm – 6.00	B Sury	A Panoramic view of the state of the
Chair: Jugal Kishore Verma			pm	(ISI, Bangalore)	Art in Mathematics
Plenary 4	3	29/12/2024	3.50 pm – 4.50	Harish Seshadri	Comparison geometry of Kahler
Chair: <b>S Ponnusamy</b>			pm	(IISc, Bengaluru)	manifolds

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# Symposium Talks – Algebra

### Venue: Classroom No. 256, Block II, Third Floor

#### Day 1

### Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
	10.50 am – 11.20	Sudhir Ghorpade	Projective Reed-Muller Codes and Pure Resolutions
A.V. Jayanthan	am	(IIT Bombay)	
	11.20 am – 11.50	Anuradha Sharma	Some new constructions of optimal and almost optimal locally
	am	(IIIT Delhi)	repairable codes
	12.00 pm – 12.30	A.V. Jayanthan	On the v-number of binomial edge ideals of some classes of
Anuradha Sharma	pm	(IIT Madras)	graphs
	12.30 pm – 1.00	Mousumi Mandal	On the Higher Hilbert Coefficients and the depth of the associated
	pm	(IIT Kharagpur)	graded ring

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# Symposium Talks – Algebra

### Venue: Classroom No. 256, Block II, Third Floor

Day 2

#### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk
	10.45 am – 11.15	Ananthnarayan Hariharan	Purity of Syzygies of Associated Graded Modules
Sudhir Ghorpade	am	(IIT Bombay)	
	11.15 am – 11.45	Rajiv Kumar	Extremal rays of Betti cones over Fibre product
	am	(IIT Jammu)	
	11.55 am – 12.25	Neeraj Kumar	Almost Complete Intersections: Regularity of powers and
Arindam Banerjee	pm	(IIT Hyderabad)	Rees algebra
	12.25 pm – 12.55	Parangama Sarkar	Asymptotic behavior of v-number of filtrations of ideals
	pm	(IIT Palakkad)	
	2.20 pm – 2.50	Ambily A.A.	Elementary subgroups of orthogonal groups
Ananthnarayan H.	pm	(CUSAT)	
	2.50 pm – 3.20	Mrinal Kanti Das	Some open problems
	pm	(ISI Kolkata)	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# Symposium Talks – Algebra

### Venue: Classroom No. 256, Block II, Third Floor

Day 3

### Date: 29/12/2024

Chair	Time	Speaker	Title of the talk
	9.15 am – 9.45	Ananya Pal	On Embedding of linear hypersurfaces and the Zariski
Indrantha Sengupta	am	(ISI Kolkata)	Cancellation Problem
	9.45 am – 10.15	Surjeet Kour	Coalgebra, Comodule and (Co)homology theories
	am	(IIT Delhi)	
	10.45 am – 11.15	Prosenjit Das	An Epimorphism Problem of Sathaye
Indranath Sengupta	am	(IISST Trivandrum)	
	11.15 am – 11.45	Arindam Banerjee	Castelnuovo-Mumford Regularity and Combinatorics
	am	(IIT Kharagpur)	
	11.55 am – 12.25	Dipankar Ghosh	Complexity and curvature of (pairs of) Cohen-Macaulay
Parangama Sarkar	pm	(IIT Kharagpur)	modules, and their applications
	12.25 pm – 12.55	Shreedevi Masuti	Hilbert functions of Artinian local level K-algebras
	pm	(IIT Dharwad)	

# **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

	Cont	ributory Talks – Algebra	1	
Day 1		Date: 27/12/2024	Time 2.30 pm – 3.30 pm	
-	Venue: Classroom No. 25	54, Block II, Third Floor	(Parallel Session)	
Chair	Speaker		Title of the talk	
	Jebasingh R	On vanishing of the Euler cycles	under sub integral extensions	
	(IISER Kolkata)			
A.V. Jayanthan	Shruti Priya	Bounds on the Castelnuovo-Mur	nford regularity	
	(IIT Kharagpur)			
	Chaithra B J	On radicals in hyperrings		
	(MIT, Manipal)			
	Venue: Classroom No. 25	55, Block II, Third Floor	(Parallel Session)	
Chair	Speaker		Title of the talk	
	Suraj Kumar	Linearly presented ideals and (G	{d-2}) condition	
	(IIT Delhi)			
Prosenjit Das	Gayathry Pradeep	Equality of DSER elementary orthogonal group and Eichler-Siegel-Dickson		
	(CUSAT)	transvection group		
	Dev Karan Singh	Tensor square and isoclinic exter	nsions of multiplicative Lie algebras	
	(MNNIT Allahabad)			
	Venue: Classroom No. 25	56, Block II, Third Floor	(Parallel Session)	
Chair	Speaker		Title of the talk	
	Jitender	Majid algebra structure on divisi	on algebras	
	(MNNIT Allahabad)			
Neeraj Kumar	Astha Agrawal	Additive one-rank hull codes ov	er finite fields	
	(IISc Bangalore)			
	Tushar Singh	Characterization of s-Artiain ring	gs	
	(MNNIT Allahabad)			

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

**Contributory Talks – Algebra** 

Day	<b>2</b> 7

Date: 28/12/2024

Time 3.50 pm – 4.50 pm

Venue: Classroom No. 254, Block II, Third Floor (Parallel Session)

Chair	Speaker	Title of the talk			
	Theophilus Gera	Modules with descending chain conditions on principal			
	(Sardar Vallabhbhai National Institute of Technology)	ideals			
	Prativa Biswas	Asymptotic behaviour and stability index of v-numbers of			
Mousomi Mandal	(IIT Kharagpur)	graded ideals			
	Samarendra Sahoo	Quasi-pure resolutions and some lower bounds of Hilbert			
	(IIT Bombay)	coefficients of Cohen-Macaulay modules			
Venue: Classroom No. 255, Block II, Third Floor (Parallel Session)					
Chair	Speaker	Title of the talk			
	Anuj Kumar Bhagat	Cyclic locally recoverable LCD codes with the help of			
	(IIT Delhi)	cyclotomic polynomials			
Ambily A.A.	Ankit Yadav	ACD codes and cyclic codes over Z2Rk			
	(IIT Delhi)				
	Ritesh Kumar Pandey	Weyl modules for twisted toroidal Lie algebras			
	(IIT Kanpur)				
	Venue: Classroom No. 256, Block II, Third	d Floor (Parallel Session)			
Chair	Speaker	Title of the talk			
	Praveen Manju	Twisted derivations of group algebras with coding theory			
	(IIT Delhi)	applications			
	Vidya Sagar	Linear Codes with Low-Dimensional Hull			
Arindam Banerjee	(IISc Bangalore)				
	Deivanai Jaisankar	Generalized m-polar fuzzy outerplanar graphs and its			
	(Shiv Nadar University Chennai)	application in social network			

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Contributory Talks – Algebra**

Day 3

Date: 29/12/2024

Time 2.20 pm – 3.40 pm

### Venue: Classroom No. 254, Block II, Third Floor (Parallel Session)

Chair	Speaker	Title of the talk
	Nupur Patanker (IISc Bangalore)	Next-to-minimal weight of Toric codes defined over hypersimplices
Ananthnarayan H.	Om Prakash	Type of finite-complement submonoids of an affine cone
	(IIT Bombay)	
	Shashi Ranjan Sinha	On a relative dependency formula
	(IIT Hyderabad)	

#### Venue: Classroom No. 256, Block II, Third Floor (Parallel Session)

Chair	Speaker	Title of the talk
	Javadekar Omkar Deepak	Linear Quotients of Connected Ideals of Graphs
	(IIT Bombay)	
	Meghana Bhat	Symmetric decomposition of the Hilbert function of an m-Primary ideal
Dipankar Ghosh	(IIT Dharwad)	
	Akanksha	Generalizations of cyclic codes over product rings
	(IIT Delhi)	
	Mansi Goyal	Computation Friendly Multi-key Fully Homomorphic Encryption without
	(IIT Roorkee)	Ciphertext Extension Algorithm

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# Symposium Talks – Algebraic Geometry

### Venue: Classroom No. 002, Block I, Ground Floor

### Day 1

### Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
	10.50 am – 11.20	Poornapushkala Narayan	Lazarsfeld-Mukai bundles and parabolic structures
Pranav Pandit	am	(Madras School of Economics Chennai)	
	11.20 am – 11.50	Anoop Singh	On the moduli space of Lie algebroid connections over
	am	(IIT(BHU) Varanasi)	a compact Riemann surface
	12.00 pm – 12.30	Sudarshan Gurjar	Eilenberg MacLane surfaces in Algebraic Geometry
Mainak Poddar	pm	(IIT Bombay)	
	12.30 pm – 1.00	Pranav Pandit	Towards a categorical Donaldson-Uhlenbeck-Yau
	pm	(ICTS-TIFR Bengaluru)	correspondence

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Symposium Talks – Algebraic Geometry**

### Venue: Classroom No. 002, Block I, Ground Floor

### Day 2

### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk		
	10.45 am – 11.15 am	Parvez Rasul	Irreducibility of some Quot schemes on Nodal curves		
Anoop Singh		(IIT Bombay)			
	10.15 am – 11.45 am	Samarpita Ray	The topological shadow of F1-geometry: congruence spaces		
		(Barclays Mumbai)			
	11.55 am – 12.25 pm	Arijith Mukherjee	Multi Symmetric products of curves and their relevance to the		
Sudarshan Gurjar		(IIT Madras)	matrix divisors.		
	12.25 pm – 12.55 pm	Arijith Dey	Brauer group of moduli spaces.		
		(IIT Madras)			
	2.20 pm – 3.20 pm	Mainak Poddar	Equivariant bundles on toric DM stacks		
Arijith Dey		(IISER Pune)			
, ,	2.20 pm – 3.20 pm	Jyoti Dasgupta	Equivariant Vector Bundles on complexity-one T-varieties and		
		(IIT Dhanbad)	Bruhat-Tits buildings		

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Symposium Talks – Algebraic Geometry**

#### Venue: Classroom No. 002, Block I, Ground Floor

Day 3

Date: 29/12/2024

Talk	Time	Speaker	Title of the talk
	9.15 am – 9.45 am	Bivas Khan	Tropical Vector Bundles
Samarpita Ray		(CMI, Chennai)	
	9.45 am – 10.15	Pavan Adroja	On certain Tannakian fundamental group schemes
	am	(IIT Gandhinagar)	
	10.45 am – 11.15	Ashima Bansal	The Nagata Conjecture over characteristic zero fields
Mandira Mondal	am	(IISER, Tirupati)	
	11.15 am – 11.45	Gopinath Sahoo	Tensor <i>t</i> -structures on the derived categories and
	am	(TIFR Mumbai)	perversity functions
	11.55 am – 12.25	Sreenanda SB	Application of Polynomials that Exactly Counts Double
Poornapushkala Narayan	pm	(University of Hyderabad)	Exponential
	12.25 pm – 12.55	Mandira Mondal	Polynomial invariant rings of finite groups
	pm	(University of Hyderabad)	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Algebraic Geometry**

Day 3

Date: 29/12/2024

Time 2.20 pm – 3.40 pm

#### Venue: Classroom No. 002, Block I, Ground Floor

Chair	Speaker	Title of the talk
Archana Subhash Morye	Aditya Subramaniam (Manipal Institute of Technology Manipal)	Algebraic properties of binomial edge ideals of Levi graphs associated with curve arrangements

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Complex Analysis**

### Venue: Classroom No. 225, Block II, First Floor

### Day 1

### Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
	10.50 am – 11.20	Toshiyuki Sugawa	Hypergeometric functions and Hausdorff moment sequences
	am	(Tohoku University Japan)	
Amar Deep Sarkar	11.20 am – 11.50	Purvi Gupta	A characterization of rational convexity in Stein and projective
	am	(IISc Bengaluru)	manifolds
	12.00 pm – 12.30	Md. Firoz Ali	The Pre-Schwarzian and Schwarzian norm of harmonic and
S Ponnusamy	pm	(NIT Durgapur)	logharmonic functions
	12.30 pm – 1.00	Vikramjeet Singh Chandel	Continuous extension of biholomorphisms using the geometry
	pm	(IIT Kanpur)	of horospheres

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

### **Symposium Talks – Complex Analysis**

### Venue: Classroom No. 225, Block II, First Floor

### Day 2

#### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk	
	10.45 am – 11.45	Gautam Bharali	The squeezing function: exact computations and a new	
Toshiyuki Sugawa	am	(IISc Bengaluru)	application	
	10.45 am – 11.45	Bappaditya Bhowmik	Criteria for quasiconformal extensions of certain classes	
	am	(IIT Kharagpur)	of functions	
	11.55 am – 12.25	P. Muthukumar	Automorphisms of subalgebras of bounded analytic	
Bappaditya Bhowmik	pm	(IIT Kanpur)	functions	
	12.25 pm – 12.55	Sushil Gorai	Polynomial convexity of the closure of certain	
	pm	(IISER Kolkata)	pseudoconvex domains	
	2.20 pm – 2.50	Sanjeev Singh	On starlikeness of regular Coulomb wave functions	
Gautam Bharali	pm	(IIT Indore)		
	2.50 pm – 3.20	Jugal Kishore Prajapat	A family of analytic functions defined by differential	
	pm	(Central University Rajasthan)	inequality and its Applications	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Symposium Talks – Complex Analysis**

### Venue: Classroom No. 225, Block II, First Floor

Day 3

Date: 29/12/2024

Chair	Time	Speaker	Title of the talk
	9.15 am – 9.45 am	Vasudevarao Allu	Landau-Bloch type theorem for elliptic and quasiregular
Sushil Gorai		(IIT Bhubaneswar)	harmonic mappings
	9.45 am – 10.15 am	Vibhuti Arora	Bohr-Rogosinski type inequalities for concave univalent
		(NIT Calicut)	functions
	10.45 am – 11.15	Amar Deep Sarkar	Visibility of the Kobayashi Distance and Applications
Vikramjeet Singh Chandel	am	(IIT Bhubaneswar)	
	11.15 am – 11.45	Sivaguru	Holomorphic extension of a class of CR functions near a
	am	(TIFR-CAM Bengaluru)	CR singularity
	11.55 am – 12.25	R. Vijayakumar	Refinements in Bohr-Type Inequalities for Analytic
Vasudevarao Allu	pm	(NIT Calicut)	Functions on Shifted Disks
	12.25 pm – 12.55	Rakesh Kumar Parmar	On Extended Exton's Triple and Horn's Double
	pm	(Pondicherry University)	Hypergeometric Functions and Related Bounds

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Complex Analysis**

Day 1

Date: 27/12/2024

Time 2.30 pm – 3.30 pm

### Venue: Classroom No. 225, Block II, First Floor (Parallel Session)

Chair	Speaker	Title of the talk
	Balakrishnan K P	Landau's theorem for certain type of biharmonic mappings
	(Madras Christian College)	
Sanjeev Singh	Jocelyn Johnson	Riesz - Fejer inequalities for a differential operator of a harmonic function
	(Madras Christian College)	
	C. Infantina Sharmi	Hall's conjecture for length of images of ray under a class of analytic univalent
	(Madras Christian College)	mappings

#### Venue: Classroom No. 224, Block II, First Floor (Parallel Session)

Chair	Speaker	Title of the talk
	Kartika Verma	Properties of a subclass of meromorphic univalent functions with a non-zero
	(Madras Christian College)	pole inside the unit disk
Vibhuti Arora	S. Sunil Varma	On certain properties of generalized Goodman - Ronning type harmonic
	(Madras Christian College)	univalent starlike mappings
	Shankey Kumar	Revisit of multi-dimensional bohr radius
	(IIT Madras)	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Contributory Talks – Complex Analysis**

Day 2

Date: 28/12/2024

Time 3.50 pm – 4.50 pm

Venue: Classroom No. 225, Block II, First Floor

(Parallel Session)

Chair	Speaker	Title of the talk
	Abraham Dinesh R (Rathinam College of Arts and Science)	Mandelbrot sets in the development of modern mathematics
Md. Firoz Ali	Jasbir Parashar (IIT Ropar)	On some subclasses of harmonic functions defined by the dilatation being the square of an analytic function
	Husna V (Presidency University)	Results on difference operators of meromorphic and entire functions sharing rational function with finite weight

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Complex Analysis**

Day 3

Date: 29/12/2024

Time 2.20 pm – 3.40 pm

Venue: Classroom No. 225, Block II, First Floor

(Parallel Session)

Chair	Speaker	Title of the talk
	Agnihotri Roy (Pondicherry University)	Bounding inequalities and integral transforms of extended complete omega function
P. Muthukumar	Uthara S (Pondicherry University)	On generalized extended voigt-type function and associated bounds
	S Pirivina (Pondicherry University)	On generalized fractional derivative operators involving hypergeometric functions and associated generating relations

## **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Functional Analysis**

### Venue: Classroom No. 201, Block II, Ground Floor

### Day 1

#### Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
теерир	10.50 am – 11.20 am	Vamsinadh Thota (NIT Tiruchirappalli)	On Equability and Ball Equability in Banach Spaces
I S S K K Kao	11.20 am – 11.50 am	Arpita Mal (DAIICT Gandhinagar)	Extreme points of the unit ball of $L(X) *_W$ and best approximation in $L(X)_W$
Anil Kumar Karn	12.00 pm – 12.30 pm	Jayanarayanan C R (IIT Palakkad)	Strong proximinality of the unit ball of compact operators on Hilbert spaces
	12.30 pm – 1.00 pm	Gargi Ghosh (IIT Roorkee)	2-proper holomorphic images of classical Cartan domains

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Functional Analysis**

### Venue: Classroom No. 201, Block II, Ground Floor

#### Day 2

### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk		
Sudashna Pagu	10.45 am – 11.15 am	M A Sofi (Kashmir University Srinagar)	Bilipschitz Embedding Into Hilbert Spaces		
Sudesnna Basu	11.15 am – 11.45 am	Susmita Seal (RKMVERI)	Ball separation characterization of dentability and related properties in Banach spaces		
S Lalithambigai	11.55 am a– 12.25 pm	Anil Kumar Karn (NISER Bhubaneswar)	On the geometry of an order unit space		
	12.25 pm – 12.55 pm	Gayathri P (IIT Bombay)	Generalizations of Hahn-Banach extension property		
C D Iovenemenen	2.20 pm – 2.50 pm	Sudeshna Basu (Loyola University)	Diameter 2 Properties in duals of Ideals in Banach Spaces		
C K Jayanarayanan	2.50 pm – 3.20 pm	Neeru Bala (IIT (ISM) Dhanbad)	Nayak's Theorem for exponential of compact operators		

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Functional Analysis**

### Venue: Classroom No. 201, Block II, Ground Floor

#### Day 3

### Date: 29/12/2024

Chair	Time	Speaker	Title of the talk		
Privanka Crovor	9.15 am – 9.45 am	Uday Shankar Chakraborty (Assam University Silchar)	On some Bishop-Phelps-Bolloba`s type properties of operators with respect to minimum norm and Crawford number		
F Hyalika Glover	9.45 am – 10.15 am	Aryaman Sensarma (NIT Silchar)	Russo-Dye type Theorem, Stinespring representation, and Radon Nikody`m derivative for invariant block multilinear completely positive maps		
Pradipta Bandyopadhyay	10.45 am – 11.15 am	S Lalithambigai (Madurai Kamaraj University)	Ball Proximinal Banach Spaces		
	11.15 am – 11.45 am	Soumitra Daptari (Shiv Nadar Institution of Eminence)	Uniqueness of Hahn-Banach extensions in renorming spaces		
	11.55 am – 12.25 pm	Deepak Gothwal (ISI Kolkata)	Residuality of uniformly smooth norms via ball separation		
M A Sofi	12.25 pm – 12.55 pm	Priyanka Grover (Shiv Nadar Institution of Eminence)	Distance problems for tuples of operators		

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

### **Contributory Talks – Functional Analysis**

Day 1

Date: 27/12/2024

Time 2.30 pm – 3.30 pm

#### Venue: Classroom No. 201, Block II, Ground Floor

Chair	Speaker	Title of the talk
	Kamleshkumar Ratilal Baleviya (Sardar Patel University)	Compact elements in weighted discrete abelian semigroup algebra $l^1(S_1 \times S_2, \omega)$
Aryaman Sensarma	Arindam Mandal (NISER Bhubaneswar )	Pointwise Lipschitz functions
	Sudhir Kumar (Sardar Patel University)	Functions of bounded fractional differential variation

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

### **Contributory Talks – Functional Analysis**

Day 2

Date: 28/12/2024

Time 3.50 pm – 4.50 pm

#### Venue: Classroom No. 201, Block II, Ground Floor

Chair	Speaker	Title of the talk
	Bhaskar Paul (IIT Bhilai)	Operators on Hilbert space having gamma $\Gamma_{E(3;3;1,1,1)}$ and gamma $\Gamma_{E(3;2;1,2)}$ as spectral sets
Gargi Ghosh	Priyanka Priyadarshini Behera (IIT Kharagpur)	Some geometric properties of LUR Banach spaces and renormings
	Jitender Sharma (IISER Kolkata)	Quantum isomorphism of 2-graphs

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Functional Analysis**

Day 3

Date: 29/12/2024

#### Time 2.20 pm – 3.40 pm

#### Venue: Classroom No. 201, Block II, Ground Floor

Chair	Speaker	Title of the talk
	Sumit Kumar (JNU New Delhi)	On various notions of distance between subalgebras of operator algebras
	Ankit Kumar (Punjab Engineering College Chandigarh)	A new characterization of Browder's theorem arising from Fredholm theory
Susmita Seal	Manu Rohilla (J.C. Bose University of Science and Technology Faridabad)	Common fixed points and coincidence points under a homotopy of families of mappings in b-metric spaces
	Kiran Antony (NIT Karnataka)	Baire Functions and Non-isolated Discontinuous Forts

## **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Geometry and Topology**

# Venue: Classroom No. 238, Block II, Second Floor

# Day 1

### Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
Soumua Dov	10.50 am – 11.20 am	Ajay Singh Thakur (IIT Kanpur)	On KO-groups of complex Milnor hypersurface
Jouniya Dey	11.20 am – 11.50 am	Madeti Prabhakar (IIT Ropar)	On Twisted Knots
Krichshnandu Canganadhyay	12.00 pm – 12.30 pm	C P Anil Kumar (Krea University)	Combinatorics and Topology of Hyperplane Arrangements
Kiisiisiiileiluu Goligopauliyay	12.30 pm – 1.00 pm	Sushil Bhunia (BITS Pilani Hyderabad)	Twisted conjugacy in Torelli groups

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Symposium Talks – Geometry and Topology**

### Venue: Classroom No. 238, Block II, Second Floor

### Day 2

#### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk		
Bankteshwar Tiwari	10.45 am – 11.45 am	Prateep Chakraborty (IIT Kharagpur)	A structure theorem and left orderability of a quotient of quasi-isometry group of the real line		
	10.45 am – 11.45 am	Soma Maity (IISER Mohali)	Volume growth and positive scalar curvature		
C P Anil Kumar	11.55 am – 12.25 pm	Atreyee Bhattacharya (IISER Bhopal)	On Geometric realizations of cyclic actions on surfaces		
	12.25 pm – 12.55 pm	Neeraj K. Dhanwani (IISER Mohali)	Liftable mapping class groups of surfaces		
Ajay Singh Thakur	2.20 pm – 2.50 pm	Sourav Ghosh (Ashoka University)	Flat affine manifolds with free fundamental group		
	2.50 pm – 3.20 pm	Bankteshwar Tiwari (Banaras Hindu University Varanasi)	Funk-Finsler structure in constant curvature spaces		

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Geometry and Topology**

#### Venue: Classroom No. 238, Block II, Second Floor

### Day 3

#### Date: 29/12/2024

Chair	Time	Speaker	Title of the talk	
	9.15 am – 9.45 am	Kuldeep Saha (TCG CREST Kolkata)	Topology of Matching complex via discrete Morse theory	
Krishshilehuu Gongopaunyay	9.45 am – 10.15 am	Pratulananda Das (Jadavpur University Kolkata)	On certain observations of characterized subgroups for arithmetic and related sequences	
	10.45 am – 11.15 am	Gangotryi Sorcar (Krea University)	High dimensional hyperbolic virtually fibered right-angled Coxeter groups	
Aipan Kabiraj	10.15 am – 11.45 am	Shubhabrata Das (Presidency University Kolkata)	Amenable action for Groups with weak hyperbolicity properties	
	11.55 pm – 12.25 pm	Arpan Kabiraj (IIT Palakkad)	Lifting criteria of closed curves to finite covers	
Soumya Dey	12.25 pm – 12.55 pm	Gautam Bharali (IISc Bengaluru)	A metrical notion of negative curvature and applications to the Kobayashi metric	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Geometry and Topology**

Day 1

Date: 27/12/2024

Time 2.30 pm – 3.30 pm

#### Venue: Classroom No. 238, Block II, Second Floor (Parallel Session – II)

Chair	Speaker	Title of the talk
	Debamita Chatterjee	Charactarisation of distal actions of automorphisms on the
	(JNU New Delhi)	space of one-parameter subgroups of Lie groups
Shubhabrata Das	Sai Rasmi Ranjan Mohanty	Genus zero complete maximal maps and maxfaces with an
	(Shiv Nadar Institution of Eminence Delhi NCR)	arbitrary number of ends
	Manoj Prajapati	Expansive actions of automorphisms of locally compact
	(Charotar University of Science and Technology)	groups on the space of closed subgroups

#### Venue: Classroom No. 237, Block II, Second Floor (Parallel Session – II)

Chair	Speaker	Title of the talk
	Raju Kumar Gupta	A characterization of normal 3-pseudomanifolds with at
	(IIT Delhi)	most two singularities
Gangotryi Sorcar	Sayoojya Prakash	On rigidity of conformal submersions
	(IISER Bhopal)	
	Rivu Bardhan	Higher genus maxfaces with one Enneper end
	(Shiv Nadar Institute of Eminence Delhi NCR)	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074 Contributory Talks – Geometry and Topology

Day 2

#### Date: 28/12/2024

Time 3.50 pm – 4.50 pm

### Venue: Classroom No. 238, Block II, Second Floor (Parallel Session)

Chair	Speaker	Title of the talk
	Bhola Nath Saha	Length of filling pairs on punctured surfaces
	(IIT Kanpur)	
C P Anil Kumar	Himanshu Chandrakar	Topology of total cut and cut complexes of grid graphs
	(IIT Bhilai)	
	Rohit Nageshwar	Stability in set-valued dynamics: A pointwise perspective
	(University of Delhi)	

### Venue: Classroom No. 237, Block II, Second Floor (Parallel Session)

Chair	Speaker	Title of the talk
	Ramesh Kumar	Dynamics of set-valued maps from topological and measure
	(University of Delhi)	theoretical view point
Kuldeep Saha	Anu Dhochak	Construction and singularities of higher genus maxfaces
-	(Shiv Nadar Institution of Eminence Delhi NCR)	
	Nayan Adhikary	Topological transitivity and skew products
	(IIT Delhi)	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074 Contributory Talks – Geometry and Topology

Day 3

#### Date: 29/12/2024

Time 2.20 pm – 3.40 pm

Venue: Classroom No. 238, Block II, Second Floor (Parallel Session – II)

Chair	Speaker	Title of the talk
	Bidyabati Thangjam	Ricci soliton and thermodynamical fluid spacetime
	(Mizoram University)	
Gangotryi Sorcar	Swarup Kumar Das	Khovanov homology and exotic discs
	(TCG CREST)	
	Aninda Banerjee	Spanning tree model for Chromatic homology
	(TCG CREST)	

### Venue: Classroom No. 237, Block II, Second Floor (Parallel Session – II)

Chair	Speaker	Title of the talk
	Navnath Daundkar	Equivariant parametrized topological complexity
	(IISER Pune)	
Kuldeep Saha	Deepanshi Saraf	Residual finiteness of fundamental n-Quandles of links
-	(IISER Mohali)	
	Deblina Das	Simple Lift of Non-Simple Closed Curves
	(IIT Palakkad)	

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Symposium Talks – Groups and their Representations**

### Venue: Classroom No. 004, Block I, Ground Floor

Day 1

### Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
	10.50 am – 11.20 am	Santosh Nadimpalli (IIT Kanpur)	Twisted Jacquet modules of GL(2, D)
Ashish Mishra	11.20 am – 11.50 am	Manju Khan (IIT Ropar)	On the units in group rings over $Z_n$
Pooja Singla	12.00 pm – 12.30 pm	Ashish Mishra (LNMIIT Jaipur)	Gelfand models for finite complex reflection groups
	12.30 pm – 1.00 pm	Shushma Rani (IISc Bengaluru)	Filtration of tensor product of local Weyl modules by fusion modules

### **Complete Schedule**

**Department of Sciences and Humanities** CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Groups and their Representations**

## Venue: Classroom No. 004, Block I, Ground Floor

Day 2 Chair Time Speaker Title of the talk 10.45 am -Sunil Kumar Prajapati Character Codegrees and Exceptional Groups 11.45 am (IIT Bhubaneswar) Manoj Kumar Yadav 10.45 am -Sugandha Maheshwari Cut groups: progress and problems 11.45 am (IIT Roorkee) 11.55 am -Krishnendu Gongopadhyay Character variety of Anosov representations 12.25 pm (IISER Mohali) **B.** Sury 12.25 pm -Shradha Srivastava On Kostant's problem 12.55 pm (IIT Dharwad) Unitriangular factorization, and Commutator Width for 2.20 pm - 2.50 **B** Sury pm (ISI Bengaluru) Chevalley groups and Applications to Kazhdan's Property T Krishnendu Gongopadhyay for Holomorphic Matrices. Covering Numbers of Some Irreducible Characters of the 2.50 pm - 3.20 **Rijubrata Kundu** pm (IMSc Chennai) Symmetric Group

Date: 28/12/2024

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Symposium Talks – Groups and their Representations**

#### Venue: Classroom No. 004, Block I, Ground Floor

Day 3

#### Date: 29/12/2024

Chair	Time	Speaker	Title of the talk
Shradha Srivastava	9.15 am – 9.45 am	G Krishna Teja (ISI Bengaluru)	Weyl Character Type Formulas
	9.45 am – 10.15 am	Manoj Kumar Yadav (HRI Allahabad)	Isoclinism of algebraic structures: then and now
Venketasubramanian C. G.	10.45 am – 11.15 am	Radhika Ganapathy (IISc Bengaluru)	An Iwahori variant of the Kazhdan isomorphism
	11.15 am – 11.45 am	Sandip Singh (IIT Bombay)	Lattices in Rn $\rtimes$ SL2(R)
Sandip Singh	11.55 pm – 12.55 pm	Venketasubramanian C. G. (IISER Tirupati)	Twisted Jacquet modules of principal series representations of <i>p</i> -adic groups
	11.55 pm – 12.55 pm	Jyotirmoy Ganguly (Gitam University Bengaluru)	Spinoral Representations of the Symmetric Groups

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Groups and their Representation**

Day 1Date: 27/12/2024Time 2.30 pm - 3.30 pm

### Venue: Classroom No. 0044, Block I, Ground Floor

Chair	Speaker	Title of the talk
	Nabajit Talukdar (Cotton University)	Some results on GVS-groups with two character degrees
Sunil Kumar Prajapati	Sabyasachi Dhar (IIT Kanpur)	Compatibility of Kazhdan and Brauer homomorphism
	Gurleen Kaur (IIT Ropar)	Representation dimension of p-Groups

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Harmonic Analysis**

#### Venue: Classroom No. 213, Block II, Ground Floor

Day 1

Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
Pradeep Boggarapu	10.50 am – 11.20 am	Narayanan E. K. (IISc Bengaluru)	Homogeneous operators and Mackey's imprimitivity theorem
	11.20 am – 11.50 am	Sayan Bagchi (IISER Kolkata)	On pseudo-multipliers associated to Grushin operators.
Sayan Bagchi	12.00 pm – 12.30 pm	Sanjay Parui (NISER Bhubaneswar)	Boundedness of Differential Transforms for Dunkl Heat Semigroups
Jayan Dageni	12.30 pm – 1.00 pm	Pradeep Boggarapu (BITS Pilani Goa)	Strichartz inequalities in Dunkl setting

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# Symposium Talks – Harmonic Analysis

### Venue: Classroom No. 213, Block II, Ground Floor

### Day 2

#### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk		
Narayanan E. K.	10.45 am – 11.45 am	Samya Kumar Ray (IISER Thiruvananthapuram)	Weighted weak (1, 1) estimate for non-commutative square function		
	10.45 am – 11.45 am	Abhishek Ghosh (IIT Jammu)	Hardy-Littlewood maximal function on homogeneous trees		
Sanjay Parui	11.55 am – 12.25 pm	Suparna Sen (University of Calcutta)	Beurling's theorem and radiality		
	12.25 pm – 12.55 pm	Amit Samanta (RMVERI)	Paley-Wiener theorem for Weyl transform of radial function		
M. Sundari	2.20 pm – 2.50 pm	Muna Naik (IISc Bengaluru)	<i>L<sup>p</sup></i> -asymptotic behaviour of approximate identities on homogeneous groups		
	2.50 pm – 3.20 pm	Jayanta Sarkar (IISER Kolkata)	<i>L<sup>p</sup></i> -asymptotic behaviour of solutions of the heat equation on Riemannian symmetric spaces of non-compact type		

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

### **Symposium Talks – Harmonic Analysis**

### Venue: Classroom No. 213, Block II, Ground Floor

Day 3

#### Date: 29/12/2024

Chair	Time	Speaker	Title of the talk
Amit Samanta	9.15 am – 9.45 am	M. Sundari (CMI Chennai)	Benedicks theorem and the Heisenberg group
	9.45 am – 10.15 am	Ramesh Manna (NISER Bhubaneswar)	The square function related to Fourier integral operator
	10.45 am – 11.15 am	Senthil Raani K S (IISER Berhampur)	Szemeredi type theorems
Pratyoosh Kumar	11.15 am – 11.45 am	Somnath Ghosh (IISc Bengaluru)	Density of exponentials and Perron-Frobenius operators.
Senthil Raani K S	11.55 pm – 12.55 pm	Shyam Swarup Mondal (ISI Kolkata)	Szeg ö limit theorems for Anharmonic oscillators
	11.55 pm – 12.55 pm	Pratyoosh Kumar (IIT Guwahati)	Eigen function of the Laplace- Beltrami operator

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

### **Contributory Talks – Harmonic Analysis**

Day 1

Date: 27/12/2024

Time 2.30 pm – 3.30 pm

#### Venue: Classroom No. 213, Block II, Ground Floor

Chair	Speaker	Title of the talk
	Nishta Garg (IISER Bhopal)	Riesz transforms associated with the twisted Laplacian with drift
Samya Kumar Ray	Ravi Singh Chauhan (University of Allahabad)	Product of quantum dynamical systems on shadowing property
	Joydwip Singh (IISER Kolkata)	Bochner-Riesz commutators for Grushin operators

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Harmonic Analysis**

Day 2

Date: 28/12/2024

Time 3.50 pm – 4.50 pm

#### Venue: Classroom No. 213, Block II, Ground Floor

Chair	Speaker	Title of the talk
	Arvish Dabra (IIT Delhi)	Restriction theorems for the p-analog of the Fourier-Stieltjes algebra
Ramesh Manna	Lalit Mohan (IIT Delhi)	Weighted periodic and discrete pseudo-differential operators
	Kanupriya (IIT Delhi)	Spectral synthesis in the multidimensional Fourier algebra

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

### **Contributory Talks – Harmonic Analysis**

Day 3

Date: 29/12/2024

Time 2.20 pm – 3.40 pm

#### Venue: Classroom No. 213, Block II, Ground Floor

Chair	Speaker	Title of the talk
	Ritika Singhal (IIT Delhi)	Restriction theorems for the p-analog of the Fourier-Stieltjes algebra
Muna Naik	Rattan Lal (Punjab Engineering college Chandigarh)	Orlicz Figa-Talamanca Herz algebras and its properties
	Shubhankar Ghosh (University of Calcutta)	Generalized Beurling theorem on Heisenberg motion groups and two step nilpotent Lie groups
	Prerna Gulia (IIT Delhi)	Gutzmer's formula on H-type groups

## **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Partial Differential Equations**

## Venue: Classroom No. 203, Block II, Ground Floor

## Day 1

### Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
Anup Biswas	10.50 am – 11.20 am	Arka Mallick (IISc Bengaluru)	Excess Decay for quasilinear equations in the Heisenberg Group and consequences
	11.20 am – 11.50 am	Indranil Chowdhury (IIT Kanpur)	Degenerate Fully Nonlinear Mean Field Game with Nonlocal Diffusion
Dabdin Canguly	12.00 pm – 12.30 pm	Anup Biswas (IISER Pune)	On the solutions of local Hamilton-Jacobi Equations with Gradient Nonlinearity.
Debuip Gangury	12.30 pm – 1.00 pm	Prashanta Garain (IISER Berhampur)	Weak Harnack inequality for a mixed local and nonlocal parabolic equation

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Partial Differential Equations**

### Venue: Classroom No. 203, Block II, Ground Floor

### Day 2

### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk
	10.45 am – 11.45 am	Tuhin Ghosh (HRI Allahabad)	Inverse Scattering problem for the fractional Schrödinger equation
	10.45 am – 11.45 am	Divyang Bhimani (IISER Pune)	Low-Regularity global solution of the inhomogeneous nonlinear Schr ödinger equation in modulation spaces
	ſ		
Arka Mallick	11.55 am – 12.25 pm	Debayan Maity (TIFR-CAM Bengaluru)	Solids moving in a viscous fluid
	12.25 pm – 12.55 pm	Rajib Dutta (IISER Kolkata)	Global approximate controllability of the Camssa-Holm equation in one dimension
Divyang Bhimani	2.20 pm – 2.50 pm	Shirshendu Chowdhury (IISER Kolkata)	Null-controllability of compressible Navier-Stokes equations in one dimension
	2.50 pm – 3.20 pm	Amrita Ghosh (HRI Prayagraj)	A thin film model of a meniscus evolution

## **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Partial Differential Equations**

### Venue: Classroom No. 203, Block II, Ground Floor

Day 3

Date: 29/12/2024

Chair	Time	Speaker	Title of the talk
	9.15 am – 9.45 am	Mousomi Bhakta	Fractional Schr odinger equations with mixed
Dobabrata Karmakar		(IISER Pune)	nonlinearities
	9.45 am – 10.15	Abhishek Sarkar	Degenerate Schr ödinger-Kirchhoff (p, N)- Laplacian with
	am	(IIT Jodhpur)	singular Trudinger-Moser nonlinearity in Rn
	10.45 am – 11.15	Debanjan Nandi	A general Dech transform for diffusion processes
	am	(IISc Bengaluru)	A general Doob transform for unrusion processes
Mousomi Bhakta	11.15 am - 11.45	Mayukh Mukherjee	Spectra of pogatively gurred Piemannian manifolds
	am	(IIT Bombay)	Spectra of negativery curved Kiemannian manifolds
Debdip Ganguly	11.55 am – 12.25	Debabrata Karmakar	Quantitative stability of the Poincar e-Sobolev inequality
	pm	(TIFR-CAM Bengaluru)	on the hyperbolic space
	12.25 pm – 12.55		
	pm		

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks - Partial Differential Equations**

Day 1

Date: 27/12/2024

Time 2.30 pm – 3.30 pm

### Venue: Classroom No. 203, Block II, Ground Floor (Parallel Session – III)

Chair	Speaker	Title of the talk
	Bhawini Prasad	A mathematical model for personalized nanomedicine to treat stenosis
	(IIT Madras)	in a patient suffering from diabetes
	Rekha Bali	Effect of transport of nanoparticles on diffusive flux and filtration
Nisha Mary Thomas	(Harcourt Butler Technical University	efficiency in capillary - tissue exchange system: A mathematical model
	Kanpur)	
	Suman Kanungo	Nonlocal problem with critical exponential nonlinearity of
	(IIT Bhilai)	convolution type: A non-resonant case

### Venue: Classroom No. G, Block II, Ground Floor (Parallel Session – III)

Chair	Speaker	Title of the talk
	Stuti Das	Gradient Holder regularity in mixed local and nonlocal linear
	(IIT Kanpur)	parabolic problem
Manjunatha S	Anupma Arora	Existence results for singular double phase problem with variable
	(BITS Pilani)	exponents
	Anusree R	Sign changing solutions for the gradient type $(p, q)$ - Laplacian system
	(IIT Hyderabad)	$\ln R^n$

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Contributory Talks – Partial Differential Equations**

Day 2Date: 28/12/2024Time 3.50 pm - 4.50 pmVenue: Classroom No. 203, Block II, Ground Floor(Parallel Session - III)

Chair	Speaker	Title of the talk
	Shilpa Gupta	Generalized concentration compactness principle and its applications to
	(IIT Kanpur)	fractional problems with critical growth in R <sup>n</sup>
Ammani Kuttan B	Atanu Manna	Existence and multiplicity of non-radial sign-changing solutions for a
	(IIT Hyderabad)	semilinear elliptic equation in hyperbolic space
	Vikas Kashinath Wakode	Monotone method for Hadamard fractional differential equations and
	(Shrikrishna Mahavidyalaya Gunjoti)	applications

#### Venue: Classroom No. 206, Block II, Ground Floor (Parallel Session – III)

Chair	Speaker	Title of the talk
	Vikram Yallapa Naik	On a critical Choquard-type equation with vanishing potential in the
	(IIT Kanpur)	Heisenberg group
Siddabasappa C	Shrabanika Boruah	Effect of magnetic parameter on the reflected waves in generalized
	(Mizoram University)	magneto micropolar thermoelastic materials
	Himanshu Kumar Dwivedi	A novel fast second order approach with high-order compact difference
	(IIT (BHU) Varanasi)	scheme and its analysis for the tempered fractional Burgers equation

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks - Partial Differential Equations**

Day 3

Date: 29/12/2024

Time 2.20 pm – 3.40 pm

Venue: Classroom No. 203, Block II, Ground Floor (Parallel Session – III)

Chair	Speaker	Title of the talk
	Richa Singh	An efficient cubic spline method with convergence analysis for higher dimensional
	(IIT BHU)	time-fractional reaction-diffusion problems
	Priyanka A. Singh	Convergence analysis for variable coefficient time-fractional reaction-diffusion
Tanuja N	(IIT (BHU) Varanasi)	equation exhibiting non-smooth solution
	Aishwarya Jaiswal	A computationally efficient approach for a system of singularly perturbed semilinear
	(IIT BHU)	convection diffusion differential equations
	N N Dattatreya	On boundary blow up solution to p-Laplace equation on infinite cylinders
	(IIT Kanpur)	

Venue: Classroom No. 206, Block II, Ground Floor (Parallel Session – III)

Chair	Speaker	Title of the talk
	K Ashok Kumar	Strict monotonicity of the first q-eigenvalue of the fractional p-Laplace operator over
	(TIFR - CAM Bengaluru)	annuli
	Chetan Singh	Entropy Stable Finite Difference Schemes for Chew, Goldberger & low Anisotropic
Nisha Mary Thomas	(IIT Delhi)	Plasma Flow Equations
	Nirjan Biswas	On generalized eigenvalue problems of fractional (p, q)-Laplace operator with two
	(IISER Pune)	parameters
	Rohit Kumar	Characterization of Higher Order Fractional Weighted Homogeneous Spaces

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

CHRIST (Decined to be Oniversity), Dengalara - 500074			
	(IIT Jodhpur)		

# **Symposium Talks – Probability Theory**

### Venue: Classroom No. 111, Block I, Ground Floor

Day 1

Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
	10.50 am – 11.20 am	Nishant Chandgotia	Forbidding patterns: Some simple combinatorics and some
Kumariit Saha		(TIFR-CAM, Bengaluru)	seemingly difficult questions.
Kumarjit Sana	11.20 am – 11.50 am	Debanjan Nandi	Random walks in hyperbolic groups, Lyons-Sullivan discretizations
		(IISc Bengaluru)	and Martin boundaries
	12.00 pm – 12.30 pm	<b>Gugan Thoppe</b>	The Shadow Knows: Empirical Distributions of Minimum Spanning
Dobloong Thackar		(IISc Bengaluru)	Acycles and Persistence Diagrams of Random Complexes.
	12.30 pm – 1.00 pm	Kumarjit Saha (Ashoka University)	A continuum oriented percolation model.

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Probability Theory**

### Venue: Classroom No. 111, Block I, Ground Floor

### Day 2

### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk
Gugan Thoppe	10.45 am – 11.45 am	Veeraruna Kavitha (IIT Bombay)	Behavioral game dynamics with rational and irrational players.
	10.45 am – 11.45 am	Subhamay Saha (IIT Guwahati)	Zero Sum Risk-sensitive Semi-Markov Games.
Subhamay Saha	11.55 am – 12.25 pm	Souvik Roy (ISI Kolkata)	Aggregation of Choice Functions on Non-rational Domains.
	12.25 pm – 12.55 pm	Atul Shekhar (TIFR-CAM Bengaluru)	On the domain of attraction of Branching Brownian motion.
	2.20 pm – 2.50 pm	Suprio Bhar (IIT Kanpur)	Kac's Central Limit Theorem by Stein's Method.
Atul Sneknar	2.50 pm – 3.20 pm	Subhajit Ghosh (ISI Bengaluru)	On the number of components of random polynomial lemnisccates

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Probability Theory**

### Venue: Classroom No. 111, Block I, Ground Floor

### Day 3

### Date: 29/12/2024

Chair	Time	Speaker	Title of the talk	
Ayan Bhattacharya	9.15 am – 9.45 am	Debleena Thacker (University of Durham)	Long-range one-dimensional internal-diffusion aggregation.	
	9.45 am – 10.15 am	Somya Singh (IIT Bombay)	An interacting network of finite memory P'olya urns.	
Anand Deo	10.45 am – 11.15 am	Chetan D. Pahlajani (IIT Gandhinagar)	Some limit theorems for stochastic differential equations with small random noise and fast periodic sampling.	
	11.15 am – 11.45 am	Ayan Bhattacharya (IIT Bombay)	Persistence exponent of the regular varying random walk	
Chetan D. Pahlajani	11.55 am – 12.25 pm	Ananya Lahiri (IIT Tirupati)	A lagged cross correction model for dependent data with memory and its application in finance.	
Circuit D. Fainajain	12.25 pm – 12.55 pm	Anand Deo (IIM Bengaluru)	Quantifying the cost of safe decision making through analysis of chance constrained optimization problems.	

## **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Probability Theory**

Day 1

Date: 27/12/2024

Time 2.30 pm – 3.30 pm

#### Venue: Classroom No. 111, Block I, First Floor

Chair	Speaker	Title of the talk
	Arnab Chowdhury	Large deviation principle for complex solution to squared Bessel
Nishant Chandgotia	(TIFR CAM Bengaluru)	SDE
	Aditya Kumar Yadav	A study of generalized and skewed generalized student's <i>T</i> -
	(Tezpur University)	distributions

### **Contributory Talks – Probability Theory**

Day 2Date: 28/12/2024Time 3.50 pm - 4.50 pm

#### Venue: Classroom No. 111, Block I, First Floor

Chair	Speaker	Title of the talk
	Pritam Dahal	On the estimation of excess over threshold distribution function
Suprio Bhar	(Tezpur University)	
	Yeshvandhini Kumar	Solving Multi-Attribute Decision-Making problems using Interval-
	(Shiv Nadar University)	Valued Intuitionistic Fuzzy Yager Geometric Aggregation operators

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

### **Symposium Talks – Number Theory**

#### Venue: Classroom No. 205, Block II, Ground Floor

### Day 1

Date: 27/12/2024

Chair	Time	Speaker	Title of the talk
Shalini Bhattacharya	10.50 am – 11.20	Veekesh Kumar	Rational approximations to linear combinations of powers of
	am	(IIT Dharwad)	algebraic numbers
	11.20 am – 11.50	Divyum Sharma	On Diophantine equations arising from numeration systems
	am	(BITS Pilani)	on Diophantine equations ansing non-numeration systems
Veekesh Kumar	12.00 pm – 12.30	Shaunak Deo	Level raising for modular forms in the residually reducible
	pm	(IISc Bengaluru)	case
	12.30 pm – 1.00	Shalini Bhattacharya	Mod p reduction of Galois representations via LLC
	pm	(University of Hyderabad)	Production of Galois representations via LEC

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Number Theory**

### Venue: Classroom No. 205, Block II, Ground Floor

### Day 2

#### Date: 28/12/2024

Chair	Time	Speaker	Title of the talk
Brundaban Sahu	10.45 am – 11.15 am	Somnath Jha (IIT Kanpur)	Some cases of the cube sum problem
	11.15 am – 11.45 am	Balesh Kumar (IIT Ropar)	Traces of (sesqui)-harmonic Maass forms and its arithmetic
Anupam Saikia	11.55 am – 12.25 pm	Supriya Pisolkar (IISER Pune)	Uniform Groups & the Fontaine-Mazur Conjecture
	12.25 pm – 12.55 pm	Mihir Sheth (IISc Bengaluru)	Strong linear independence of primitive forms
Somnath Jha	2.20 pm – 2.50 pm	Bidisha Roy (IIT Tirupati)	Geometric interpretation of certain moments of Hypergeometric character sums
	2.50 pm – 3.20 pm	Anupam Saikia (IIT Guwahati)	A criterion for congruent numbers in terms of class number of associated quadratic fields

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

# **Symposium Talks – Number Theory**

## Venue: Classroom No. 205, Block II, Ground Floor

### Day 3

### Date: 29/12/2024

Chair	Time	Speaker	Title of the talk
Supriya Pisolkar	9.15 am – 9.45 am	Brundaban Sahu (NISER Bhubaneswar)	Nonvanishing of kernel functions and Poincar <sup>'</sup> e series for Jacobi forms
	9.45 am – 10.15 am	Sudipa Mondal (IIT Madras)	Quadratic twist of epsilon factor of symmetric power transfers of a modular form
	ſ		
Balesh Kumar	10.45 am – 11.15 am	Ekata Saha (IIT Delhi)	Arithmetic nature of special values of the incomplete gamma and beta functions
	11.15 am – 11.45 am	Biswajyoti Saha (IIT Delhi)	Convergence of multiple polylogarithm at integer point outside the domain of absolute convergence
	•		
Ekata Saha	11.55 am – 12.25 pm	Jyothsnaa S (IISER Thiruvananthapuram)	Products of primes in ray classes
	12.25 pm – 12.50 pm	Keshav Aggarwal (IIT Bombay)	Short second moment bound and subconvexity for GL(3) L- functions

### **Complete Schedule**

Department of Sciences and Humanities CHRIST (Deemed to be University), Bengaluru - 560074

## **Contributory Talks – Number Theory**

Day 1

Date: 27/12/2024

Time 2.30 pm – 3.30 pm

#### Venue: Classroom No. 205, Block II, Ground Floor

Chair	Speaker	Title of the talk
	Ashish Kumar Pandey	On inequalities related to the Jordan totient function and
	(University of Allahabad)	some Lucas sequences
Divyum Sharma	Kushal Bhowmick	The size of 2-Selmer groups for the $\pi/3$ -congruent
	(Harish-Chandra Research Institute)	number problem
	Bhargab Das	<i>p</i> -adic Artin Formalism of twisted triple product
	(Harish-Chandra Research Institute)	

	Contributory Talks -	- Number Theory
Day 2	Date: 28/12	/2024 Time 3.50 pm – 4.50 pm
	Block II, Ground Floor	
Chair	Speaker	Title of the talk
	Vrikshavardhana Hebbar N	On the distribution of quadratic residues and nonresidues
	(NIT Mysuru)	modulo prime <i>p</i>
Bidisha Roy	Manjunatha M R	Partition of quadratic residues and non-residues in $Z_p^*$ for
	(IIT Indore)	an odd prime <i>p</i>
	Omprakash Atale	The size of 2-Selmer groups for the $\pi/3$ -congruent number
	(Pune University)	problem

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