

International Congress of Mathematicians

ICM 2010

August 19 - 27, 2010

Hyderabad, India

Schedule of Short Communications

Note: Each short communication is a talk of 15 minutes' duration and there is a gap of 5 minutes between successive talks. Three talks are provided for in each one-hour slot.

1 Logic and Foundations

Sunday, August 22, 2010

17:00-18:00

Room No. 1.06

Chair: S. M. Srivastava

17:00-17:15 K. Chowdhury, Guwahati University

Another arithmetization and Gödel's second incompleteness theorem

17:20-17:35 B. Loewe, Universiteit Van Amsterdam

Modal logics of forcing

17:40-17:55 R. Natarajan, Tata Institute of Fundamental Research

Computer-aided proofs

18:00-19:00

Room No. 1.06

Chair: S. M. Srivastava

18:00-18:15 B. Khots, Compressor Controls Corporation

Analogy of Hilbert's tenth problem in observers mathematics

18:20-18:35 A. Kuzichev, Moscow State University

Sequential two-level formalization of mathematical theories

18:40-18:55 G. Ouyang, Zhangzhou Teachers' College

Uncountability of the real number set and the foundation of mathematics

Friday, August 27, 2010

17:00 - 18:00

Room No. 1.06

Chair: H. Woodin

17:00-17:15 G. Vasanti, Andhra University

Some properties of images and inverse images of L-intuitionistic or L-vague fuzzy subsets

17:20-17:35 S. Salehi, University of Tabriz

Herbrand consistency and bounded induction

17:40-17:55 B. Razet, Tata Institute of Fundamental Research

Effective Eilenberg machines

2 Algebra

Friday, August 20, 2010

15:00-16:00

Room No. T1

Chair: R. C. Cowsik

15:00-15:15 L. Van Wyk, Stellenbosch University

Invertibility and Dedekind finiteness in structural matrix rings

15:20-15:35 S. D. Kumar, Motilal Nehru National Institute of Technology

Analogue of Eakin Sathaye theorem over Rees Algebra

15:40-15:55 Passi, I. B. S., Panjab University

Groups in which elements of same order outside a normal subgroup N are in the same coset of N

16:00-17:00

Room No. T1

Chair: R. C. Cowsik

16:00-16:15 M. Pacini, Universidade Federal Fluminense

On Abel maps for singular curves

16:20-16:35 V. K. Bhat, SMVD University

Associated prime ideals of weak σ -rigid rings and their extensions

16:40-16:55 S. Ali, Aligarh Muslim University

On Jordan $$ -derivations in rings with involution*

17:00-18:00

Room No. T1

Chair: R. C. Cowsik

17:00-17:15 H. V. Ha, Institute of Mathematics, VAST

Lojasiewicz inequality at infinity for polynomials in two real variables

17:20-17:35 C. T. Le, Quy Nhon University

On equinormalizable deformations of isolated singularities

17:40-17:55 T. G. Jaiyeola, Obafemi Awolowo University

New identities in universal Osborn loops

Sunday, August 22, 2010

15:00-16:00

Room No. T1

Chair: Jugal Verma

15:00-15:15 D. Nagaraju, Periar Maniammai University

Some dimension conditions in rings with finite dimension

15:20-15:35 S. P. Kuncham, M.I.T., Manipal

Line graphs and quasdi total graphs

15:40-15:55 V. R. Potluri, Reed College

Finite non-solvable groups having a unique irreducible character of a given degree

16:00-17:00

Room No. T1

Chair: Jugal Verma

16:00-16:15 K-B. Nam University of Wisconsin-Whitewater

Automorphism group of a Witt type Lie algebra and the Jacobian conjecture

16:20-16:35 L. J. Boya, University of Zaragoza

A different approach to Mathieu groups

16:40-16:55 N. U. Rehman, Aligarh Muslim University

On generalized Jordan triple derivations on rings

17:00-18:00

Room No. T1

Chair: Clare d’Cruz

17:00-17:15 M. Ashraf, Aligarh Muslim University

On symmetric generalized (α, β) -biderivations in rings

17:20-17:35 A. Kamaraju, R. B. V. R. R. Women’s College

Translation plane of order 81

17:40-17:55 M. R. Darafsheh, University of Tehran

On factorization of finite groups

18:00-19:00

Room No. T1

Chair: Clare d’Cruz

18:00-18:15 M. R. Jamal, Aligarh Muslim University

Orthogonal generalized derivations in Γ -rings

18:20-18:35 F. Sikander, Aligarh Muslim University

Some characterizations of submodules of QTAG-modules

18:40-18:55 S. Veldsman, Sultan Qaboos University

Convolution rings and some applications

Wednesday, August 25, 2010

15:00-16:00

Room No. T1

Chair: S. A. Katre

15:00-15:15 M. Hebert, American University in Cairo

What is a finitely related structure, categorically?

15:20-15:35 S. K. Khanduja, Panjab University

Prolongations of valuations to finite extensions

15:40-15:55 A. Khan, Aligarh Muslim University

Generalized (σ, τ) -higher derivations in prime rings

16:00-17:00

Room No. T1

Chair: S. A. Katre

16:00-16:15 P. Chen, Shande Tarining Centre

On the discriminant of a general polynomial in terms of elementary symmetric functions

16:20-16:35 S. Bhavanari, Acharya Nagarjuna University

Prime graph of a ring

16:40-16:55 B. Khosravi, Amirkabir University of Technology

Quasirecognition of $L_{32}(2)$ by its prime graph

17:00-18:00

Room No. T1

Chair: S. K. Khanduja

17:00-17:15 J. H. Meyer, University of the Free State

O-primitivity in matrix near rings

17:20-17:35 M. Sehatkhah, University of Payame Noor

On the finiteness properties of extension functor and local cohomology module

17:40-17:55 A. Abdollahi, University of Isfahan

Cohomologically trivial modules over finite p -groups

18:00-19:00 Room No. T1
 Chair: **S. K. Khanduja**
18:00-18:15 J. M. P. Balmaceda, University of The Philippines
Gelfand pairs in alternating groups
18:20-18:35 J. E. Pantoja, Pontifica Universidad Catolica De valparaiso
Generalized Weil representation for classical groups with a Bruhat presentation
18:40-18:55 B. S. Kedukodi, M. I. T., Manipal
Reference points and roughness

Thursday, August 26, 2010

17:00-18:00 Room No. T2
 Chair: **A. V. Jayanthan**
17:00-17:15 R. P. Sharma, Himachal Pradesh University
Connes subgroups and graded semi-rings
17:20-17:35 T. Vasanthi, Yogi Vemana University
On the additive and multiplicative structure of semirings
17:40-17:55 I. Yengui, University of Sfax
Stably free modules over $R[X]$ of rank $> \dim R$ are free

18:00-19:00 Room No. T2
 Chair: **A. V. Jayanthan**
18:00-18:15 S. A. Katre, Pune University
Matrices over Dedekind domains as sums of k -th powers
18:20-18:35 T. M. Keller, Texas State University
Lower bounds for the number of conjugacy classes in finite groups

Friday, August 27, 2010

15:00-16:00 Room No. T1
 Chair: **U. K. Anandavardhanan**
15:00-15:15 V. Yanchevskii, National Academy of Sciences of Belarus
On special homomorphic images of $SU(1, D)/[U(1, D), U(1, D)]$
15:20-15:35 A. Khaksari, Payam-E-Noor University
Generalization of prime ideals and prime submodules
15:40-15:55 J. W. Lim, Postech
Prüfer v -multiplication domains and related domains of the form $A + B[\Gamma^]$*

16:00-17:00 Room No. T1
 Chair: **U. K. Anandavardhanan**
16:00-16:15 P. T. Toan, Pohang University of Science and Technology
Krull dimension in power series rings
16:20-16:35 S. Murthy, Oxford Brookes University
Probabilistic algorithms and results for the complexity of group theoretic matrix multiplication

17:00-18:00 Room No. T1
 Chair: **U. K. Anandavardhanan**
17:00-17:15 C. Guddati, Andhra University
On prime filters in normal almost distributive lattices
17:20-17:35 P. Murgel Veloso, Universidade Federal De Minas Gerais
Alternating units in integral group rings
17:40-17:55 O. R. Devi, Manipur University
A study on fuzzy ideals of N -groups

3 Number Theory

Saturday, August 21, 2010

15:00-16:00

Room No. T1

Chair: M. Manickam

15:00-15:15 J. Singh, Guru Nanak Dev University

Defining power sums of n and $\varphi(n)$ integers

15:20-15:35 A. Redondo Buitrago, I. E. S. Bachiller Sabuco

On continued fraction expansions of the n -th roots of the solutions of certain quadratic equations

15:40-15:55 D. Shah, Sir P. T. Sarvajanik College of Science

Interesting properties related with the Tribonacci sequence

16:00-17:00

Room No. T1

Chair: M. Manickam

16:00-16:15 V. M. Spinadel, University of Buenos Aires

Excess continued fraction expansions

16:20-16:35 V. K. Gurtu, Nagpur University

Newer facet of prime number theory

16:40-16:55 S. K. Jena, K.I.I.T. university

A conjecture on integer powers

17:00-18:00

Room No. T1

Chair: C. S. Dalawat

17:00-17:15 K. A. Broughan, University of Waikato

Shifted primes and semismooth numbers

17:20-17:35 A. U. O. Kisisel, Middle east technical University

On certain products which are never squares

17:40-17:55 R. Khassa, Panjab University

Some irreducibility results for truncated binomial expansions

18:00-19:00

Room No. T1

Chair: C. S. Dalawat

18:00-18:15 N. Manickam, Depauw University

A dual to Erdős-Ko-Rado theorem (?)

18:20-18:35 A. A. Glibichuk, Universidad Nacional Autonoma De Mexico, Campus Morelia

Multilinear exponential sums in an arbitrary finite field under optimal entropy condition on the sources

18:40-18:55 A. Ubis, Universidad Autonoma De Madrid

The number of sumsets in a finite field

Tuesday, August 24, 2010

15:00-16:00

Room No. T1

Chair: A. Ivic

15:00-15:15 F. Luca, UNAM

On sums of Fibonacci numbers modulo p

15:20-15:35 K. Vajjha, St. Patrick's Junior Collge

On Pythagorean triples of the form $(i, i + 1, k)$

15:40-15:55 P. N. Sabu, T. I. M. E.

Proof of Fermat's last theorem

16:00-17:00 Room No. T1
 Chair: **A. Ivic**
16:00-16:15 Y. G. Chen, Nanjing Normal University
On a Sierpinski's problem
16:20-16:35 T. Mincheva,
Lagrange's method in the theory of diophantine equations
16:40-16:55 J. Zhang, Shenzhen Senior High School
On primes and the prime factorization of composite numbers in a polynomial sequence

17:00-18:00 Room No. T1
 Chair: **A. Ivic**
17:00-17:15 R. O. Quintero Contreras, Universidad De Los Andes
The Josephus problem generalized
17:20-17:35 J-H. Fang, Nanjing Normal University
On additive complements
17:40-17:55 V. V. Rane, Institute of Science, Mumbai
Instant evaluation of $\zeta(-n, \alpha)$, $\zeta_r(-n_1, -n_2, -n_3, \dots, -n_r)$, $\zeta(n)$, $L(n, \chi)$

18:00-19:00 Room No. T1
 Chair: **B. Ramakrishnan**
18:00-18:15 I. D. Skhredov, Moscow State University
Combinatorial configurations in dense subsets of two-dimensional grid
18:20-18:35 K. C. Prasad, Ranchi University
A new point in Lagrange's spectrum near sup of complement of L
18:40-18:55 E. R. Oberaigner, University of Leoben
A novel polynomial criterion and algorithm for twin primes

19:00-20:00 Room No. T1
 Chair: **B. Ramakrishnan**
19:00-19:15 J. Bellingham, Fairfax Media Ltd.
Fermat's last theorem
19:20-19:35 M. P. Ulas, Jagiellonian University
Higher twists of elliptic curves with positive rank
19:40-19:55 O. German, Moscow State University
Transfer inequalities for diophantine exponents

Thursday, August 26, 2010

15:00-16:00 Room No. T1
 Chair: **K. Srinivas**
15:00-15:15 A. Tripathi, IIT
Exact results for the Frobenius problem in three variables
15:20-15:35 G. Soydan, Isiklar Air Force High School
On the solutions of some specific exponential diophantine equations
15:40-15:55 D. Shirolkar, Pune University
Jacobi sums and cyclotomic numbers of order ℓ^2

16:00-17:00

Room No. T1

Chair: K. Srinivas

16:00-16:15 P. Kirschenhofer, University of Leoben

Shift radix systems - finiteness and periodicity properties

16:20-16:35 R. Barman, Tezpur University

A note on Iwasawa μ -invariants of elliptic curves

16:40-16:55 N. Dasgupta, Indira Gandhi National Open University

Probability of integers being prime and usage of prime pairs in cryptography

17:00-18:00

Room No. T1

Chair: K. Srinivas

17:00-17:15 A. Ivic, Serbian Academy of Sciences

On the mean square of $|\zeta(1+it)|$

17:20-17:35 D. Gusic, University of Sarajevo

On the prime geodesic theorem for hyperbolic with cusps

17:40-17:55 T. Okada, Fukushima Medical University

Applications of a multinomial measure to the digital sums

4 Algebraic and Complex Geometry

Saturday, August 21, 2010

15:00-16:00

Room No. T2

Chair: **A. J. Parameswaran**

15:00-15:15 M. Mase, Tokyo Metropolitan University

Isomorphism among the families of weighted K3 hypersurfaces

15:20-15:35 M. L. Logares Jimenez, CSIC

Moduli of parabolic Higgs bundles and Atiyah algebroids

15:40-15:55 R. Rubio Nuñez, ICMAT CSIC

Higgs bundles and generalized Cayley correspondence

16:00-17:00

Room No. T2

Chair: **A. J. Parameswaran**

16:00-16:15 D. C. McFeron, Ramapo College of NJ

Remarks on some non-linear heat flows in Kähler geometry

16:20-16:35 E. D. Kozłowska-Walania, University of Gdansk

On the real nerve of the moduli space of complex algebraic curves

16:40-16:55 S. D. Lawton, University of Texas-Pan American

Topology and singularity of free group character varieties

17:00-18:00

Room No. T2

Chair: **Ravi Rao**

17:00-17:15 M. Watari, Tsuyama National College of Technology

Hilbert schemes of r -points for irreducible plane curve singularities

17:20-17:35 M. L. Bhupal, Middle East Technical University

Weighted homogeneous singularities and rational homology disk smoothings

17:40-17:55 R. M. Garimella, Communication Research Centre, IIT, Hyderabad

Stochastic chains: matrix power series equations: algebraic geometry: quantity theory

18:00-19:00

Room No. T2

Chair: **Ravi Rao**

18:00-18:15 D.M. Maingi, University of Nairobi

On the minimal number of generators of an ideal of general points in a projective space P_4

18:20-18:35 T. Kergilova

A characterization of Möbius transformations by use of fixed cross ratios

5 Geometry

Friday, August 20, 2010

15:00-16:00

Room No. T2

Chair: N. S. Narasimha Sastry

15:00-15:15 G. P. F. Bessa, Universidade Federal Do Ceara

The spectrum of the Martin-Morales-Nadirashvili minimal surfaces is discrete

15:20-15:35 P. Piccione, Universidade De Sao Paulo

On the semi-Riemannian bumpy metric theorem

15:40-15:55 Z. Rakić, University of Belgrade

On duality principle and Osserman condition for algebraic curvature tensors

16:00-17:00

Room No. T2

Chair: N. S. Narasimha Sastry

16:00-16:15 C. Gorodski, Universidade de Sao Paulo

Isoparametric submanifolds in Hilbert space

16:20-16:35 J. P. Jaiswal, Banares Hindu University

Ricci semi-symmetric and Ricci pseudo-symmetric mixed super quasi-Einstein manifolds

16:40-16:55 A. Iqbal, Aligarh Muslim University

On geodesic E-convex sets, geodesic E-convex functions and E-epigraphs

17:00-18:00

Room No. T2

Chair: N. S. Narasimha Sastry

17:00-17:15 M. Wasadikar, Dr. Babasahib Ambedkar Marathwada University

On graphs derived from posets

17:20-17:35 S. Nimbhorkar, Dr. Babasahib Ambedkar Marathwada University

M-modular pairs in multiplicative lattices

17:40-17:55 A. Tetenov, Gorno-Altai University

Structure and rigidity of self-similar Jordan arcs in \mathbb{R}^n

Sunday, August 22, 2010

15:00-16:00

Room No. T2

Chair: Kaushal Verma

15:00-15:15 H. Ait Haddou, Institut national Polytechnique de Toulouse

From Lichnerowicz cohomology to Lichnerowicz basic cohomology

15:20-15:35 M. Karmanova, Sobolev Institute of Mathematics of SB, RAS

On local geometry of Carnot-Carathéodory spaces under minimal assumptions of smoothness

15:40-15:55 B. Wu, Minjiang University

Hypersurfaces with two distinct principal curvatures in space forms

16:00-17:00

Room No. T2

Chair: Kaushal Verma

16:00-16:15 V. Balshchenko, Belarusian State University

Invariant structures on homogeneous k-symmetric spaces

16:20-16:35 A. Sarkar, University of Burdwan

A study of three-dimensional quasi-Sasakian manifolds

16:40-16:55 J. R. Bozeman Jr., Lyndon State College

Decide if legislative districts are nicely shaped

17:00-18:00

Room No. T2

Chair: Mahan Maharaj

17:00-17:15 L. Ugarte, Universidad de Zaragoza

Complex geometry of nilmanifolds and special hermitian structures

17:20-17:35 P. M. Hornung, University of Bath

Euler-Lagrange equation and regularity for flat minimizers of the Wilmore functional

17:40-17:55 R. Guo, University of Minnesota

Combinatorial Yamabe flow on hyperbolic surfaces with boundary

18:00-19:00

Room No. T2

Chair: Mahan Maharaj

18:00-18:15 X. Xu, Binghamton University - SUNY

Harnack inequalities and monotonicity of entropy formulas on complete Riemannian manifolds with negative curvature

18:20-18:35 Y-J. Chiang, University of Mary Washington

Some properties of biwave maps

18:40-18:55 J. Barrallo, The University of the Basque Country

Expanding the Mandelbrot set into 3D and 4D

Tuesday, August 24, 2010

18:00-19:00

Room No. 2.03

Chair: Amiya Mukherjee

18:00-18:15 G. P. Silswal, H. N. B. Garhwal University

Theorems on bi-recurrent and bi-symmetric Sasakian manifolds

18:20-18:35 D. Svrtan, University of Zagreb

Intrinsic geometry of cyclic heptagons/octagons via 'new' Brahmagupta formula

18:40-18:55 L. Velimirovic,

On the Wilmore energy under infinitesimal bending

19:00-20:00

Room No. 2.03

Chair: Amiya Mukherjee

19:00-19:15 D. Alonso, Universidad De Zaragoza

On the isotropy constant

19:20-19:35 M. Djoric, University of Belgrade

Certain conditions on the second fundamental form of CR submanifolds of maximal CR dimension of complex hyperbolic space

Wednesday, August 25, 2010

15:00-16:00

Room No. T2

Chair: Shriram Nimbhorkar

15:00-15:15 E. Saorin Gómez, Otto von Guericke Universität

How to make quermassintegrals differentiable; solving a problem by Hadwiger

15:20-15:35 A. L. Albuje Brotons, Universidad De Córdoba

On the Gaussian curvature of complete spacelike surfaces in Lorentzian products

15:40-15:55 Z. Nie Penn State Altoona

Secondary Chern-Euler forms and the law of vector fields

i

16:00-17:00

Room No. T2

Chair: Shriram Nimbhorkar

16:00-16:15 M. Caballero Campos, Universidad De Córdoba

New Calabi-Bernstein results for maximal graphs and constant mean curvature spacelike graphs

16:20-16:35 S. Debnath, Jadavpur University

Ricci soliton and Ricci flow on some type of almost contact manifolds

16:40-16:55 M. Chaichiraghimi, Payam-E-Noor University

Geometry of special transformations in Riemannian manifolds

6 Topology

Friday, August 20, 2010

15:00-16:00

Room No. T3

Chair: Parameswaran Sankaran

15:00-15:15 H. Rodriguez Ordóñez, Universidad Autonoma De Aguascalientes

A counterexample to Ganea's conjecture with the minimum known dimension

15:20-15:35 J. Ali, IIT, Kanpur

Common fixed points of nonself mappings in convex metric spaces

15:40-15:55 R. N. Araújo Dos Santos, USP/ICMC

Equivalence of real Milnor fibration for quasi-homogeneous singularities

16:00-17:00

Room No. T3

Chair: Parameswaran Sankaran

16:00-16:15 D. B. Tejada Jimenez, Universidad Nacional De Colombia

Butterflies: a new representation of links

16:20-16:35 A. Pedroza, Universidad De Colima

On the bounded isometry conjecture

16:40-16:55 M. Prabhakar, IIT, Ropar

On unknotting numbers

17:00-18:00

Room No. T3

Chair: Parameswaran Sankaran

17:00-17:15 M. Gangopadhyay, Calcutta Girls' B. T. College

Separation axioms in a bi-topological space and their consequences

17:20-17:35 S. K. Singh, Banaras Hindu University

On two topologies associated with a topology

17:40-17:55 J. Kim, Konkuk University

A note on the nearly additivity of knot width

Sunday, August 22, 2010

15:00-16:00

Room No. T3

Chair: Siddhartha Gadgil

15:00-15:15 F. Azarpanah, Shahid Chamran University of Ahvaz

Linearly ordered quasi F -spaces

15:20-15:35 V. Vershinin, Université de Montpellier 2

Braids and groups, and monoids connected with them

15:40-15:55 Y. Fukumoto, Ritsumeikan University

Bounding genus and the spin cobordism category of 3-manifolds

16:00-17:00

Room No. T3

Chair: Siddhartha Gadgil

16:00-16:15 A. C. M. Thomas, Oxford University

Lattices in complete Kac-Moody groups

16:20-16:35 S. Kuroki, Korea Advanced Institute of Science and Technology

On cohomological rigidity of toric hyper-Kähler manifolds

16:40-16:55 M. Eudave Muñoz, UNAM

The hexatangle II

17:00-18:00

Room No. T3

Chair: Harish Seshadri

17:00-17:15 M. Namdari, Shahid Chamran University

a-scattered spaces

17:20-17:35 M. Skopenkov, Russian Academy of Sciences

When the set of embeddings is finite?

17:40-17:55 R. P. Devarasu, Dayalbagh Educational Institute

Path topology and simple connectedness

18:00-19:00

Room No. T3

Chair: Harish Seshadri

18:00-18:15 S. Afrooz, Khoramshahr marine Sciences and Technology University

$C_\infty(X)$ and related ideals

18:20-18:35 M. Sheik John, N. G. M. College, Pollachi

On strongly αg^ -continuous maps in bitopological spaces*

18:40-18:55 A. A. Kustarev, MSU

Almost complex quasitoric manifolds

Wednesday, August 25, 2010

15:00-16:00

Room No. T3

Chair: Birgit Richter

15:00-15:15 J. Pejsachowicz, Politecnico di Torino

Elliptic topology and bifurcation

15:20-15:35 E. Dalyan, Hitit University

Open book decompositions of links of quotient surface singularities

15:40-15:55 A. R. Aliabad, Shahid Chamran University

On the group of torsion elements of $C(X)$

16:00-17:00

Room No. T3

Chair: Birgit Richter

16:00-16:15 A. H. Cruz Cota, Grand Valley State University

The moduli space of Hex spheres

16:20-16:35 T. Ramirez Rosas, Grand Valley State University

Trisecants for knots

16:40-16:55 S. A. Antonyan, National University of Mexico

The Gromov-Hausdorff hyperspace of the unit interval

17:00-18:00

Room No. T3

Chair: Birgit Richter

17:00-17:15 S. J. John, NIT Calicut

Pairwise metacompact spaces

17:20-17:35 A. Mukherjee, Tripura University

On δsII generalized closed sets and their applications

7 Lie Theory and Generalizations

Tuesday, August 24, 2010

18:00-19:00

Room No. G05

Chair: Riddhi Shah

18:00-18:15 B. Ransingh, NIT, Rourkela

Splints of root system of classical Lie superalgebras

18:20-18:35 M. Schaps, Bar-Ilan University

A non-recursive criterion for weights of affine Lie algebra representations

18:40-18:55 P. L. Lilly, St. Joseph's College, Irinjalakuda

Intuitionistic fuzzy Lie algebra over a fuzzy field

19:00-20:00

Room No. G05

Chair: Riddhi Shah

19:00-19:15 M. M. Mishra, University of Delhi

Green functions and related boundary value problems on the Heisenberg group

19:20-19:35 A. Adrega De Moura, Universidade Estadual De Campinas

Graded characters of minimal affinizations of quantum groups

Wednesday, August 25, 2010

17:00-18:00

Room No. T2

Chair: B. S. Kiranagi

17:00-17:15 J. A. Soto Andrade, University of Chile

Motion groupoids and geometric Gelfand models

17:20-17:35 D. N. Verma, Tata Institute of Fundamental Research

On the G -superalgebra structure for higher syzygies of a projective G -variety

17:40-17:55 M. Bozicevic, University of Zagreb

Asymptotic K -character of nilpotent orbits

18:00-19:00

Room No. T2

Chair: B. S. Kiranagi

18:00-18:15 V. Sahai, Lucknow University

Irreducible p, q -representations of the Lie algebra $gl(2)$ and p, q -Mellin integral transformation

18:20-18:35 D. Jakelic, University of North Carolina, Wilmington

Tensor products and blocks of finite dimensional representations of quantum affine algebras at roots of unity

8 Analysis

Friday, August 20, 2010

15:00-16:00

Room No. T4

Chair: K. Parthasarathy

15:00-15:15 M. Assal, Faculty of Sciences of Bizerte

Convolution equation on certain hypergroups

15:20-15:35 A. Pedgaonkar, Institute of Science, Mumbai

Henstck integral, an abstract approach

15:40-15:55 J. A. Oguntuase, University of Agriculture, Abeokuta

Hardy type inequalities via superquadratic and subquadratic functions

16:00-17:00

Room No. T4

Chair: K. Parthasarathy

16:00-16:15 A. E. Gatto, DePaul University

On singular integrals defined on nondoubling measure metric spaces and Krein's theorem

16:20-16:35 Y. Rappoport, Russian Academy of Sciences

Analysis and applications of some modified Bessel functions

16:40-16:55 D. Kumar, Centre for Mathematical Sciences, Pala Campus

Some connections among generalized hypergeometric functions, q -hypergeometric functions and pathway model and their applications

17:00-18:00

Room No. T4

Chair: K. Parthasarathy

17:00-17:15 A. P. Singh, University of Jammu

On escaping sets of entire functions

17:20-17:35 Y. M. Singh, Manipur Institute of Technology

Fixed points of φ -weak contractions

17:40-17:55 L. S. Singh, D. M. College of Teacher Education

Fixed point theorems under a generalized contractive condition

Saturday, August 21, 2010

18:00-19:00

Room No. 1.03

Chair: Ratikanta Panda

18:00-18:15 S. Pulickakunnel Allahabad Agricultural Institute

Fixed point theorems for various classes of 1-set contraction mappings

18:20-18:35 M. D. de la Iglesia, Courant Institute of Mathematical Sciences

Differential properties of orthogonal matrix polynomials

18:40-18:55 V. V. H. Gollakota, S. I. W. S. College

The proof of Koebe's general uniformisation theorem for planar Riemann surfaces and its application

Sunday, August 22, 2010

15:00-16:00

Room No. T4

Chair: E. K. Narayanan

15:00-15:15 A. Singh, H. N. B. Garhwal University

Some fixed point theorems for a family of hybrid pairs of mappings in metrically convex spaces

15:20-15:35 K. Jha, Kathmandu University

A generalized common fixed point theorem in fuzzy metric space

15:40-15:55 A. K. Mishra, Berhampur University

A coefficient inequality for a subclass of Carthéodory functions

16:00-17:00 Room No. T4
 Chair: **E. K. Narayanan**
16:00-16:15 **O. P. Ahuja**, Kent State University
Use of shear construction to study harmonic univalent mappings with directional convexity
16:20-16:35 **R. K. Yadav**, J. N. V. University, Jodhpur
On q -Mellin transforms of certain basic hypergeometric functions
16:40-16:55 **A. De Pierro**, University of Campinas
On the analytic inverse of a generalized attenuated Radon transform

17:00-18:00 Room No. T4
 Chair: **G. Santhanam**
17:00-17:15 **Vasudevarao Allu**, IIT, Madras
Region of variability for spiral-like functions with respect to a boundary point
17:20-17:35 **S. Khairnar**, Maharashtra Academy of Engineering
Inclusion properties of a subclass of analytic functions defined by an integral operator
17:40-17:55 **A. S. Rawat**, H. N. B. Garhwal University, Pauri Campus
A common fixed point theorem for strict contractive condition

18:00-19:00 Room No. T4
 Chair: **G. Santhanam**
18:00-18:15 **A. Prasad**, Indian School of Mines
Continuity of pseudo-differential operator $h_{\mu,a}$ involving Hankel translation and Hankel convolution on some Gevrey spaces
18:20-18:35 **R. Vyas**, M. S. University, Baroda
On the absolute convergence of Fourier series of functions of $\lambda - b\nu(p)$ and $\phi - \lambda - b\nu$
18:40-18:55 **R. C. Dimri**, H. N. B. Garhwal University, Srinagar
Coincidences and common fixed points in intuitionistic fuzzy metric spaces

Tuesday, August 24, 2010

18:00-19:00 Room No. 1.03
 Chair: **P. K. Ratnakumar**
18:00-18:15 **A. S. Ranga**, Universidade Estadual Paulista
Related measures and L -orthogonal polynomials
18:20-18:35 **S. Bhatnagar**, Panjab University
Multipliers of $A_p(0, \infty)$ with order convolution
18:40-18:55 **B. Sarma**, M. C. College
Some difference double sequence spaces defined by Orlicz function

19:00-20:00 Room No. 1.03
 Chair: **P. K. Ratnakumar**
19:00-19:15 **W. Andrzej**, Technological University of Lodz
On some invariant of two-parametrical families of real functions
19:20-19:35 **M. Stoll**, University of South Carolina
On Littlewood-Paley type inequalities for subharmonic functions on domains in \mathbb{R}^n
19:40-19:55 **D. P. Datta**, University of North Bengal
Scale free analysis and applications: a brief report

Wednesday, August 25, 2010

17:00-18:00

Room No. T4

Chair: Victor I. Anandam

17:00-17:15 P. Sharma, Lucknow University

Some inequalities for harmonic univalent maps involving Wright generalized hypergeometric (Wgh) functions

17:20-17:35 P. M. Gauthier, Université de Montréal

Approximation of, and by, the Riemann zeta-function

17:40-17:55 L. M. Upadhyaya, Municipal Post Graduates College, Mussoorie
A note on a Lauricella-Saran triple hypergeometric function of complex matrix arguments

18:00-19:00

Room No. T4

Chair: Victor I. Anandam

18:00-18:15 Ibragimov, Zafar, Urgench State University

Quasianalytic functions of several variables in the sense of Gonchar

18:20-18:35 P. A. Hagelstein, Baylor University

Recent developments regarding the Halo conjecture

18:40-18:55 Ibragimov, Zair, California State University

A canonical δ -hyperbolic metric for metric spaces

Thursday, August 26, 2010

15:00-16:00

Room No. T4

Chair: Ajit Iqbal Singh

15:00-15:15 P. Das, Jadavpur University

Two valued measure and summability of double sequences

15:20-15:35 A. Clop, Universidad Autonoma De Barcelona

Uniqueness of normalized solutions to nonlinear Beltrami equations

15:40-15:55 N. Memić, University of Sarajevo

Fourier multipliers on totally disconnected groups

16:00-17:00

Room No. T4

Chair: Ajit Iqbal Singh

16:00-16:15 M. D. Bolt, Calvin College

A global characterization of tubed surfaces in \mathbb{C}^2

16:20-16:35 W. O. Urbina Romero, Roosevelt University

Riesz potentials, Bessel potentials and fractional derivatives on function spaces for Gaussian measure

16:40-16:55 M. Avdispahic, University of Sarajevo

Differentiation on local fields

17:00-18:00

Room No. T4

Chair: S. Kumaresan

17:00-17:15 L. Lorentzen, NTNU

Continued fractions and linear fractional transformations: why do continued fractions converge so well?

17:20-17:35 S. Piric, University of Tuzla

Determination of jumps by Fourier-Jacobi coefficients

17:40-17:55 N. Bokayev, L. N. Gumilyov Eurasian National University

On integrability with weight of the sum of series with respect to multiplicative systems

18:00-19:00

Room No. T4

Chair: **S. Kumaresan**

18:00-18:15 M. More, Maharashtra Academy

Inclusion properties of a certain subclass of strongly close-to-convex functions

18:20-18:35 L. M. Tovar Sanchez Escuela Superior De Fisica y Matematicas, IPN

Like-hyperbolic Bloch-Bergmann classes

18:40-18:55 E. Shcherbakov, Kuban State University

A new approach to the study of equilibrium of a pendant drop

Friday, August 27, 2010

15:00-16:00

Room No. T4

Chair: **B. S. Komal**

15:00-15:15 S. K. Vodopyanov, Sobolev Institute of Mathematics

L_p spaces of differentiable forms and mappings with controlled distortion

15:20-15:35 P. Srivastava, Lucknow University

Certain generalized classes of p -valent analytic functions involving convolution

15:40-15:55 M. Pathak Lucknow University

Some characterization properties of classes of p -valent analytic functions involving certain integral operators

16:00-17:00

Room No. T4

Chair: **B. S. Komal**

16:00-16:15 A. I. Singh, Indian Statistical Institute, New Delhi

Involutions in algebras arising from groups and hypergroups

16:20-16:35 J. Singh, Dr. B. R. Ambedkar National Institute of Technology

Matrix versions of some classical inequalities

16:40-16:55 P. Gochhayat, Sambalpur University

Sandwich type theorems of some subclasses of multivalent functions associated with a differential operator

17:00-18:00

Room No. T4

Chair: **B. S. Komal**

17:00-17:15 J. A. Adepoju, University of Lagos

Effectiveness of Gregory type set of interpolatory polynomials

17:20-17:35 S. George, Mangalore University

Subsets of the square with the continuous and order preserving fixed point property

17:40-17:55 M. Arunkumar, Sacred Heart College

Additive functional equations

9 Functional Analysis and Applications

Saturday, August 21, 2010

15:00-16:00

Room No. T3

Chair: Srinivasan Raman

15:00-15:15 U. C. Gairola, H. N. B. Garhwal University, Pauri Campus

Recent development in metric fixed point theory and its applications

15:20-15:35 T. S. S. R. K. Rao, Indian Statistical Institute, Bangalore

Banach-Stone theorems for spaces of vector valued functions

15:40-15:55 R. V. Rajarama Bhat, Indian Statistical Institute, Bangalore

Inclusion systems and amalgamated products of product systems

16:00-17:00

Room No. T3

Chair: Srinivasan Raman

16:00-16:15 P. Bandyopadhyay, Indian Statistical Institute

Ball remotality in Banach spaces

16:20-16:35 M. M. Madiman, Yale University

Reverse Brunn-Minkowski and reverse entropy power inequalities for convex measures

16:40-16:55 V. Manuylov, Moscow State University

One more pathology of C^ -algebraic tensor products*

17:00-18:00

Room No. T3

Chair: Subhash Bhatt

17:00-17:15 Y. Rohen Singh, D. M. College of Science

Related fixed point theorems for two set valued mappings on two uniform spaces

17:20-17:35 M. Tanveer, Jawaharlal Nehru University

Some common fixed point theorems of integral type in Menger PM spaces

17:40-17:55 T. G. Honary, Tarbiat Moellem University

Automatic continuity of n -homomorphisms between Frechet algebras and topological algebras

18:00-19:00

Room No. T3

Chair: Subhash Bhatt

18:00-18:15 Z. Wu, Fangda Group Co., Ltd.

Discrete algebraic equations and discrete operator equations

18:20-18:35 M. D. Ilyas, Gaya College

Some classes of operators related to p -hyponormal operator

18:40-18:55 B. S. Thakur, IIT, Bombay and UM-DAE CBS, Mumbai

Iterative method for finite family of hemicontractive mappings

Tuesday, August 24, 2010

15:00-16:00

Room No. T3

Chair: T. S. S. R. K. Rao

15:00-15:15 G. V. Ravindranadh Babu, Andhra University

Existence of common fixed points for a pair of generalized weakly contractive maps

15:20-15:35 M. Argerami, University of Regina

Weakly continuous Hilbert bundles over Stonean spaces and their C^ -algebras*

15:40-15:55 M. Moakher, National Engineering School at Tunis

Bhattachary divergence based mean of symmetric positive definite matrices

16:00-17:00

Room No. T3

Chair: **T. S. S. R. K. Rao**

16:00-16:15 P. Dabhi, Sardar Patel University

Multipliers on weighted semigroups

16:20-16:35 S. Bhatt, Sardar Patel University

Differential structures in C^ -algebras*

16:40-16:55 S. George NIT, Surathkal

Newton's method for nonlinear ill-posed problems

17:00-18:00

Room No. T3

Chair: **Geetha Srinivasa Rao**

17:00-17:15 R. P. Pant, University of Petroleum and Energy Studies

Fixed point theorems for generalized asymptotic contractions

17:20-17:35 A. Patel, Sardar Patel University

On two classes of operators

17:40-17:55 Anita Tomar, Government Degree College, Dakpather

Coincidence and fixed point theorems satisfying integral type implicit relations in symmetric spaces

18:00-19:00

Room No. T3

Chair: **Geetha Srinivasa Rao**

18:00-18:15 A. D. Rodríguez Arós, Universidade De Coruña

Mathematical justification of viscoelastic beam models by asymptotic methods

18:20-18:35 O. Reynov, St. Petersburg State University

Banach spaces without approximation properties of type p .

18:40-18:55 B. Djafari Rouhani, University of Texas, El Paso

Large time behaviour of solutions to some classes of second order evolution equations and difference equations

19:00-20:00

Room No. T3

Chair: **Geetha Srinivasa Rao**

19:00-19:15 P. C. S. M. Cerejeiras, Universidade De Aveiro

Reconstruction of analytic signals with prescribed symmetries

19:20-19:35 J. O. Olaleru, University of Lagos

Common fixed points for a rational inequality under weakly compatible maps in cone metric spaces

19:40-19:55 H. K. Nashine, Disha Institute of Management and Technology

Common fixed point theorem for uniformly C_q -commuting mappings satisfying a generalized asymptotically nonexpansive condition

Thursday, August 26, 2010

15:00-16:00

Room No. T3

Chair: **A. K. Vijayarajan**

15:00-15:15 U. Kähler, Universidade De Aviero

Discrete monogenic signals

15:20-15:35 M. Skopina, St. Petersburg State University

p -adic wavelets

15:40-15:55 A. Mahato, Indian School of Mines

Continuity of Bessel wavelet transform on some distribution spaces

16:00-17:00

Room No. T3

Chair: A. K. Vijayarajan

16:00-16:15 J. S. Aujla, Dr. B. R. Ambedkar National Institute of Technology

Convex functions and matrix inequalities

16:20-16:35 A. Singh, Jai Narain Vyas University

On Weierstrass transform of tempered Boehmians

16:40-16:55 L. Zhang, Renmin University of China

The characterization of a class of quantum Markov semigroups and the associated Dirichlet forms based on Hilbert C^ -modules*

17:00-18:00

Room No. T3

Chair: A. K. Vijayarajan

17:00-17:15 M. Sal Moslehian, Ferdowsi University of Mashhad

Refinements of operator Jensen's inequality

17:20-17:35 A. L. Brown, University College London

Metric projections onto finite dimensional subspaces of continuous functions

17:40-17:55 I. B. Dadashova, Baku State University

Rational approximation on closed curves

10 Dynamical Systems and Ordinary Differential Equations

Saturday, August 21, 2010

16:00-17:00

Room No. T4

Chair: **Tarun Das**

16:00-16:15 **P. K. Gupta**, Banaras Hindu University

Approximate analytical solution of fractional Lotka-Volterra equations

16:20-16:35 **T. Nayak**, N. I. T. Rourkela

Omitted values and dynamics of meromorphic functions

16:40-16:55 **R. Jain**, Solapur University

On an abstract nonlinear functional integro-differential equation with nonlocal condition

17:00-18:00

Room No. T4

Chair: **Tarun Das**

17:00-17:15 **B. S. Desale**, North Maharashtra University

Singular solution of reduced ODEs of rotating stratified Boussinesq equations

17:20-17:35 **E. Perez-Chavela**, Universidad Autonoma Metropolitana - Itzapalapa

The N-body problem in spaces of negative curvature

17:40-17:55 **K. D. Kucche**, Shivaji University

Global existence for Volterra-Fredholm functional integro-differential equations

18:00-19:00

Room No. T4

Chair: **Tarun Das**

18:00-18:15 **M. Kisaka**, Kyoto University

Some topological properties of Julia components of transcendental entire functions

18:20-18:35 **V. Gaiko**, National Academy of Sciences of Belarus

Limit cycle problems

18:40-18:55 **L. Xu**, Northwest A & F University

The existence of super-eight solution for the 4-body problem: a golden-section-assisted proof

Sunday, August 22, 2010

18:00-19:00

Room No. G05

Chair: **S. G. Dani**

18:00-18:15 **S. Pal**, University of Kalyani

A model of a plankton-nutrient interaction with instantaneous nutrient recycling

18:20-18:35 **R. Reddy**, University of Hyderabad

Soret and Dufour effects on mixed convection in a micropolar fluid saturated Darcy porous medium

18:40-18:55 **P. M. Oprocha**, Universidad De Murcia

On weak product recurrence

Tuesday, August 24, 2010

15:00-16:00

Room No. T4

Chair: F. Rodriguez Hertz

15:00-15:15 M. Sajid, Qassim University

comparative study on the dynamics of certain families of transcendental meromorphic functions

15:20-15:35 N. Pham Huu Anh, International University

Stability analysis of delayed neural networks with polytopic type uncertainties

15:40-15:55 H. L. Tidke, North Maharashtra University

On approximate solutions of integro-differential equation with nonlocal condition

16:00-17:00

Room No. T4

Chair: F. Rodriguez Hertz

16:00-16:15 V. Gejji, Pune University

Dynamical systems of fractional order

16:20-16:35 G. Röst, Hungarian Academy of Sciences and University of Szeged

From simple dynamics to chaos through nonmonotone delayed feedback

16:40-16:55 I. Matveeva, Sobolev Institute of Mathematics

Asymptotic stability of solutions to delay differential equations with periodic coefficients

17:00-18:00

Room No. T4

Chair: F. Rodriguez Hertz

17:00-17:15 D. Artamonov, Moscow State University

The Riemann-Hilbert problem on a compact Riemann surface

17:20-17:35 A. Singh, IIT, Roorkee

Complexity in a prey-predator delay model of Leslie-Gower type

17:40-17:55 D. Pachpatte, Dr. B. A. Marathwada University

Explicit estimates on certain dynamic inequalities in two variables on time scales

18:00-19:00

Room No. T4

Chair: Shoba Madan

18:00-18:15 D. Smania Brandao, ICMC-USP

Differentiation of SBR measures for topological slow recurrent unimodal maps

18:20-18:35 J. Rodriguez Hertz, IMERL

Mañé-Bochi theorem in dimension 3

18:40-18:55 F. Dumortier, Hasselt University

Slow-fast Bogdanov-Takens bifurcations

19:00-20:00

Room No. T4

Chair: Shoba Madan

19:00-19:15 S. Nakhane, Tokyo Polytechnic University

Dynamics of Axiom A polynomial skew products on C^2

19:20-19:35 A. Negut, Harvard University and IMAR, Romania

Invisible parts of attractors

19:40-19:55 M. Asaoka, Kyoto University

Rigidity and flexibility of some group actions related to real-rank one Lie groups

Wednesday, August 25, 2010

17:00-18:00

Room No. G05

Chair: Nimish A. Shah

17:00-17:15 F. Sadyrbaev, University of Latvia

Asymmetric nonlinear oscillators

17:20-17:35 H. Baek, Kyungpook National University

An impulsive two-prey one-predator system with seasonal effects

17:40-17:55 N. Artamanov, Moscow State Institute of International Relations

Exponential decay of semigroups for second order non-selfadjoint linear differential equations

18:00-19:00

Room No. G05

Chair: Nimish A. Shah

18:00-18:15 D. Pinheiro, Technical University of Lisbon

An asymptotic universal focal decomposition for a family of mechanical systems

18:20-18:35 J. P. P. De Almeida, Instituto Politécnico De Bragança

Golden tilings

18:40-18:55 Z. Smarda, Brno University of Technology

Singular Cauchy problems for certain classes of integro-differential equations

Thursday, August 26, 2010

15:00-16:00

Room No. T5

Chair: P. Bernard

15:00-15:15 J. Diblik, Brno University of Technology

Stability of solutions of linear differential systems of neutral type with constant coefficients

15:20-15:35 E. Karulina, Moscow State University of Economics, Statistics and Informatics

On siome estimates for the first eigenvalue of the Sturm-Liouville problem with third type boundary conditions

15:40-15:55 I. Astashova, Moscow State University of Economics, Statistics and Informatics

On qualitative behaviour of solutions to nonlinear ordinary differential equations of higher order

16:00-17:00

Room No. T5

Chair: P. Bernard

16:00-16:15 F. Sahraoui, University of Sidi Bel Abbès

The dynamics of holomorphic germs tangent to the identity near a smooth curve of fixed points

16:20-16:35 P. K. Srivastava, IIT, Kanpur

Modeling and analysis of HIV infection and drug therapy

16:40-16:55 B. Lakshmi, J. N. T. University

Chaotic dynamics in some pendulum type equations

17:00-18:00

Room No. T5

Chair: J. S. Aujla

17:00-17:15 H. Jafari, University of Mazandaran

Iterative methods for solving fractional differential equations

17:20-17:35 B. Ishwar, BRA Bihar University

Nonlinear stability in the generalized photogravitational restricted three body problem with Poynting-Robertson drag

17:40-17:55 N. K. Thakur, Indian School of Mines

Diffusive driven instabilities and spatio-temporal patterns in a predator-prey system

18:00-19:00

Room No. T5

Chair: **J. S. Aujla**

18:00-18:15 S. Thakar, Shivaji University

Application of Noether's theorem to non-linear oscillators through canonical transformations

18:20-18:35 J. Knezevic-Miljanovic, Belgrade University

Asymptotic properties of some nonlinear differential equations

18:40-18:55 V. Piramanantham/E. Thandapani, University of Madras

Oscillation criteria for second order nonlinear neutral type dynamic equations on time scales

19:00-20:00

Room No. T5

Chair: **J. S. Aujla**

19:00-19:15 J. Bhattacharya/S. Pal, Carey High School

Coexistence of competing predators in coral reef ecosystem

19:20-19:35 R. K. Upadhyay, Indian School of Mines

Spatio-temporal dynamics and pattern formation in aquatic predator-prey systems

19:40-19:55 A. Chatterjee, Mirzapur H. S. C. High School

Nutrient-phytoplankton-zooplankton interaction in an open marine system-model based study

Friday, August 27, 2010

17:00-18:00

Room No. G05

Chair: **W. de Melo**

17:00-17:15 S. Kendre, Pune University

On existence results of impulsive integro-differential inclusions

17:20-17:35 T. K. Dutta, Gauhati University

Determination of periodic orbits with bifurcation values, strange attractor, Lyapunov exponents and various fractal dimensions on two-dimensional discrete systems

17:40-17:55 S. Pandey, Allenhouse Institute of Technology

Controlling the spread of malaria using bacteria: a mathematical approach

11 Partial Differential Equations

Saturday, August 21, 2010

16:00-17:00

Room No. T5

Chair: **A. K. Nandakumaran**

16:00-16:15 J-P. Gossez, Université Libre de Bruxelles

Principal eigenvalues for some non-selfadjoint elliptic problems and applications

16:20-16:35 J. A. Arango Cabarcas, Universidad Del valle

Critical points of solutions to elliptic problems in planar domains

16:40-16:55 U. V. Lê, University of Oulu

On solutions of a semi-linear wave equation with space-time dependent coefficients and a memory boundary-like antiperiodic condition

17:00-18:00

Room No. T5

Chair: **A. K. Nandakumaran**

17:00-17:15 B. Y. Alvarez Samaniego, Escuela Superior Politécnica Del Litoral

Some mathematical results for the Fowler equation

17:20-17:35 C. M. Khalique, North-West University

Exact solutions of Zakharov-Kuznetsov equation with power law nonlinearity in $(1+3)$ dimensions

17:40-17:55 C. P. P. Arceo, University of The Philippines

The comparison principle in generalizing the solvability of a nonlinear parabolic equation

Tuesday, August 24, 2010

15:00-16:00

Room No. T5

Chair: **Mythily Ramaswamy**

15:00-15:15 Z. Shao, Fuzhou University

Global structure stability of Riemann solutions for linearly degenerate hyperbolic conservation laws under small BV perturbations of the initial data

15:20-15:35 G. J. Reddy, NIT, Warangal

Finite difference analysis of couple stress fluid past an infinite vertical cylinder

15:40-15:55 J. Esquivel-Avila, Universidad Autonoma Metropolitana

Decay and non-existence in a nonlinear evolution equation

16:00-17:00

Room No. T5

Chair: **Mythily Ramaswamy**

16:00-16:15 R. S. Tungala, NIT, Rourkela

Solution to magnetogasdynamics

16:20-16:35 T. Jung, Kunsan National University

The periodic solutions of the nonlinear Hamiltonian system

16:40-16:55 Q-H. Choi, Inha University

Nontrivial solutions for the nonlinear hyperbolic system

17:00-18:00

Room No. T5

Chair: **Mythily Ramaswamy**

17:00-17:15 G. Demidenko, Sobolev Institute of Mathematics

Quasielliptic operators in \mathbb{R}^n and Sobolev type equations

17:20-17:35 J. I. Cossio Betancur, Universidad nacional De Columbia

Existence of seven solutions for an asymptotically linear Dirichlet problem

17:40-17:55 I. Mamadsho, Academy of Science of Tajikistan

System of chemotaxis with nonlinear diffusion

18:00-19:00 Room No. T5

Chair: N. Burq

18:00-18:15 L. F. Dinu, Institute of Mathematics of the Romanian Academy
Nonlinearized Fourier aproach and coherence:applications to shock-turbulence interaction

18:20-18:35 P. Kokocki, Nicolaus Copernicus University
Periodic solutions for nonlinear evolution equations at resonance

18:40-18:55 A. P. Ramos, Università degli Studi di Milano Bicocca
Elliptic problems with a Hardy potential and critical growth in the gradient

19:00-20:00 Room No. T5

Chair: N. Burq

19:00-19:15 E. Varvaruca, Imperial College, London
On the existence of extreme waves and the Stokes' conjecture with vorticity

19:20-19:35 M. Bocea, North Dakota State University
 Γ -convergence of power-law functionals with variable exponents and related PDEs

19:40-19:55 A. Kananthai, Chiang Mai University
On the parmetric interest of the Black-Scholes equation

Wednesday, August 25, 2010

17:00-18:00 Room No. G03

Chair: B. Sri Padmavati

17:00-17:15 U. Kangro, University of Tartu
Convergence of interior source methods for scattering problems

17:20-17:35 A. Mandal, KIIT University
Modelling of surface air temperature and pricing of weather derivatives

17:40-17:55 B. Singh, Post Graduate Government College
Wave propagation in a thermally conducting mixture of an elastic solid and a Newtonian fluid

18:00-19:00 Room No. G03

Chair: B. Sri Padmavati

18:00-18:15 M. T. Jenaliev, Institute of Mathematics, Almaty
On a boundary value problem for spectrally loaded heat operator

18:20-18:35 T. Leonori, Universidad De Granada
Gradient bounds for elliptic problems singular at the boundary and application to a stochastic control problem with state constraint

18:40-18:55 G. Avalishvili, Tbilisi State University
On some nonclassical problems for non-stationary equations of mathematical physics

Thursday, August 26, 2010

15:00-16:00 Room No. T6

Chair: T. Amaranath

15:00-15:15 A. M. Bertone, Universidade Federal De Uberlândia
Analytic solution for a miscible displacement model in heterogeneous porous media

15:20-15:35 L. G. F. Dias, Universidade Federal De Minas Gerais
Global rough solutions to the critical generalized KdV equation

15:40-15:55 D. Shepelskiy, Verkin Institute for Low temperature Physics
The Riemann-Hilbert problem approach to the Camassa-Holm equation and the longtime asymptotics

16:00-17:00

Room No. T6

Chair: **T. Amaranath**

16:00-16:15 S. K. Mohanty, IIT, Kharagpur

A Fourier type expansion formula for problems in hydroelasticity

16:20-16:35 V. Imaykin, Research Institute for Innovative Strategies in Education development, Moscow

Scattering asymptotics for Maxwell-Lorentz system

16:40-16:55 M. Kwak, Chonnam National University

Regularity for 3D Navier-Stokes equations with large data

17:00-18:00

Room No. T6

Chair: **T. Amaranath**

17:00-17:15 E. Its, IUPUI

Riemann-Hilbert approach to scattering problems in elastic media

17:20-17:35 Amit Tomar, IIT, Roorkee

Self-similar shocks in non-ideal gas

17:40-17:55 A. G. Zarnescu, Oxford University

Mathematical problems of the Q-tensor theory

12 Mathematical Physics

Friday, August 20, 2010

15:00-16:00

Room No. T5

Chair Krishna Maddaly

15:00-15:15 **P. Braz E Silva**, Universidade Federal De Pernambuco

Eigenvalue bounds for micropolar shear flows

15:20-15:35 **M. L. Smaranda**, University of Pitesti

Optimal bounds on dispersion coefficient in periodic media

15:40-15:55 **Y. D. Sobral**, Universidade De Brasilia

Two dimensional instabilities in fluidised beds

16:00-17:00

Room No. T5

Chair Krishna Maddaly

16:00-16:15 **A. Khan**, Jai Narain Vyas University

Kelvin-Helmholtz instability of two superposed Oldroydian viscoelastic fluid layers in a horizontal magnetic field

16:20-16:35 **P. K. Sahoo**, BITS-Pilani, Hyderabad Campus

Plane symmetric cosmic strings coupled with Maxwell fields in bimetric theory

16:40-16:55 **S. S. Tak**, Jai Narain Vyas University

Thermal radiation with Soret and Dufour effects on MHD mixed convection from a vertical surface in Darcian porous media

17:00-18:00

Room No. T5

Chair Krishna Maddaly

17:00-17:15 **K. Adhav**, Sant Gadge Baba Amravati University

N-dimensional Bianchi type V universe in creation field cosmology

17:20-17:35 **S. C. Martha**, IIT, Ropar

Linear flow in three layers of fluid over an arbitrary topography

17:40-17:55 **M. Z. Afsar**, NASA Glenn Research Center

A complete theoretical foundation for the 'two-source' structure of jet noise

Saturday, August 21, 2010

18:00-19:00

Room No. G03

Chair: A. Hasmani

18:00-18:15 **A. Paul/R. Deka**, Gauhati University

Unsteady convectively driven flow past an infinite vertical cylinder in presence of chemical reaction

18:20-18:35 **K. P. Singh/K. M. Singh**, Ideal Girls' College, Imphal

String cosmological universes with the bulk viscosity in relativistic cosmology

18:40-18:55 **V. Semenov**

The 3d Navier-Stokes equations: necessary and sufficient conditions for global solutions

Sunday, August 22, 2010

15:00-16:00

Room No. T5

Chair: **K. M. Tamizhmani**

15:00-15:15 B. Mishra, BITS-Pilani, Hyderabad Campus

Inhomogeneous cosmological model in scale invariant theory

15:20-15:35 M. Sahni, Jaypee Institute of Information Technology

Elastic-plastic analysis of thin rotating disc having variable thickness and variable density with edge loading

15:40-15:55 S. Devi, Manipur University

Cosmological models of the universe with perfect fluid coupled with massless scalar field

16:00-17:00

Room No. T5

Chair: **K. M. Tamizhmani**

16:00-16:15 S. Singh, Manipur University

Cosmological models interacting with massive scalar field in Lyra's manifold

16:20-16:35 M. R. Molaei (Taherabadi), University of Kerman

A mathematical model for an observer of a set and its application in physics

16:40-16:55 R. Bajaj, Panjab University

The effect of shear flow on thermomagnetic convection in ferrofluids

17:00-18:00

Room No. T5

Chair: **Tamizharasi Tamizhmani**

17:00-17:15 G. Khadekar, R. T. M. Nagpur University

Higher dimensional cosmological model for Λ -dark energy

17:20-17:35 S. Paycha, Blaise Pascal University, Clermont-Ferrand

Divergent multiple sums and integrals with constraints

17:40-17:55 F. Mukhamedov, International Islamic University

On phase transition for countable state p -adic Potts model on the Cayley tree

18:00-19:00

Room No. T5

Chair: **Tamizharasi Tamizhmani**

18:00-18:15 R. Nandkeolyar, Indian School of Mines

Effects of radiation and rotation on MHD free convection flow past an impulsively started plate embedded in a porous medium with ramped wall temperature

18:20-18:35 A. Hasmani, Sardar Patel University

Algebraic computation of spin coefficients in Newman-Penrose formalism using Mathematica

18:40-18:55 R. Flores Espinoza, Universidad De Sonora

Periodic first integrals for Hamiltonian systems of Lie type

Tuesday, August 24, 2010

18:00-19:00

Room No. G03

Chair: **A. Kupiainen**

18:00-18:15 E. Kopylova, Institute for Information Transmission Problems

Asymptotic stability of kinks for relativistic Ginzburg-Landau equation

18:20-18:35 O. Pitalskaya, Institute for Computational Modelling

Analytical solutions for three dimensional wind induced motion of viscous homogeneous fluid

18:40-18:55 K. Saifullah, Quaid-i-Azam University

Black holes in non-commutative geometry

19:00-20:00 **Room No. G03**
Chair: A. Kupiainen
19:00-19:15 **S. R. Valluri**, University of Western Ontario
The variation of the gravitational constant and the anomalous acceleration of the Pioneer spacecrafts
19:20-19:35 **G. S. Seth**, Indian School of Mines
Unsteady hydromagnetic flow in a rotating channel with perfectly conducting walls
19:40-19:55 **V. A. Cherikuri**, B. M. Birla Science Centre, Hyderabad
The ultra relativistic Maxwell and Proca equations

Wednesday, August 25, 2010

15:00-16:00 **Room No. T5**
Chair: K. Srinivasa Rao
15:00-15:15 **V. Khambolja**, B. V. M. Engineering College
Interior black-hole solution with anisotropic fluid
15:20-15:35 **A. Murad**, University of Chittagong
The Stokes flow past shear-free spheroid
15:40-15:55 **M. D. R. Etchechoury**, Universidad Nacional De La Plata
Geometric constraint algorithms for Dirac manifolds

16:00-17:00 **Room No. T5**
Chair: K. Srinivasa Rao
16:00-16:15 **L. Kompaniets**, Institute of Computational Modelling
On the analytical solutions for some problems of diagnostic calculations of wind-induced flow
16:20-16:35 **R. Dey**, Harish-Chandra Research Institute
Geometric prequantization of various moduli spaces
16:40-16:55 **J. Bernatska**, National University of Kiev-Mohyla Academy
Applications of the method of stereographic parametrization

17:00-18:00 **Room No. T5**
Chair: Rukmini Dey
17:00-17:15 **A. Patwardhan**, St. Xavier's College
Euler characteristic in mathematical physics: for statistical physics and field theory
17:20-17:35 **M. K. Awasthi**, IIT, Roorkee
Viscous contributions to the pressure for potential flow analysis of electrodynamic Kelvin-Helmholtz instability
17:40-17:55 **O. P. Suthar**, Jai Narain Vyas University
Effect of g-jitter on the onset of thermosolutal viscoelastic convection in the absence of local thermal equilibrium

18:00-19:00 **Room No. T5**
Chair: Rukmini Dey
18:00-18:15 **Tulsi Dass** IIT, Kanpur
Supmech: a non-commutative geometry based universal mechanics accommodating classical and quantum mechanics
18:20-18:35 **S. N. Bora**, IIT, Guwahati
Scattering of oblique water waves in a two-layer fluid flowing through a channel with bottom deformation
18:40-18:55 **S. Karippadath** Nagpur University
Hyperbolic geometry and invariant ratio of quark masses

Friday, August 27, 2010

15:00-16:00

Room No. T5

Chair: Tulsi Dass

15:00-15:15 K. Pileckas, Vilnius University

On a plane steady exterior Navier-Stokes problem

15:20-15:35 P. S. R. Murthy, Gitam University

MHD two-phase flow and heat transfer between two parallel porous walls in a rotating system

15:40-15:55 D. M. Packwood, University of Canterbury

On the conceptual interpretation of Brownian motion driven stochastic differential equations

16:00-17:00

Room No. T5

Chair: Tulsi Dass

16:00-16:15 S. C. Pandey, Banasthali University

Computable extensions of generalized fractional kinetic equations in astrophysics

16:20-16:35 J. Krol, University of Silesia

Small exotic smooth R^4 and string theory

16:40-16:55 J. Vala, National University of Ireland, Maynooth

Topological phases and superconducting states in Kitaev-like lattice models

17:00-18:00

Room No. T5

Chair: Tulsi Dass

17:00-17:15 N. Ahmed, Gauhati University

MHD transient flow past an impulsively started horizontal porous plate in a rotating fluid with Hall current

17:20-17:35 H. Comman, Pontificia Universidad Catolica De Valparaiso

LDP for periodic states quantum spin systems

17:40-17:55 C. W. D. Daenzer, University of California, Berkeley

Metric stacks and Gromov-Hausdorff distance

13 Probability and Statistics

Saturday, August 21, 2010

16:00-17:00

Room No. T6

Chair: Abhay Bhatt

16:00-16:15 D. Lesmono, Parahyangan Catholic University

Mathematical modelling for LQ45 index

16:20-16:35 S. Simic, Mathematical Institute, SANU

Improvements of some moments inequalities

16:40-16:55 S. Ravi, University of Mysore

On entropy convergence of normalize partial maxima of iid random variables

17:00-18:00

Room No. T6

Chair: Abhay Bhatt

17:00-17:15 V. S. G. Sagi, Hindu College, Guntur

On construction of new circular models

17:20-17:35 F. Merchant, Tolani Foundation Gandhidham Polytechnic

Statistically, failure of inferential statistics at critical point of time

17:40-17:55 H. Fernando, Purdue University North Central

Saddlepoint based inferences for nonlinear regression models

Tuesday, August 24, 2010

15:00-16:00

Room No. T6

Chair: Ravi Sreenivasan

15:00-15:15 F. J. P. Tjhin, Parahyangan Catholic University

Valuation of American basket options by a simple binomial tree

15:20-15:35 V. M. Chacko, St. Thomas College, Thrissur

On ageing properties, semimarkov system and total time on test transforms

15:40-15:55 A. Srinivasan, Bishop Heber College, Trichirappalli

A stochastic model for the expected time to recruitment in a single graded manpower system with two thresholds following SCBZ property and correlated inter-decision times

16:00-17:00

Room No. T6

Chair: Ravi Sreenivasan

16:00-16:15 T-S. Chiang, Academia Sinica

Asymptotic expansion with double layers of singularly perturbed diffusions

16:20-16:35 B. Lafuerza-Guillén, University of Almeria

A study of boundedness in PN spaces

16:40-16:55 Y-J. Lee, National University of Kaohsiung

An application of the Siegel-Bargmann transform to the characterization of Levy white noise measures

17:00-18:00

Room No. T6

Chair: Rana Barua

17:00-17:15 G. Garg, IIM, Lucknow

Estimation of regression coefficients in a replicated measurement error model under restrictions

17:20-17:35 R. P. Suresh, General Motors

A new measure of relationship among qualitative variables

17:40-17:55 A. Olenko, La Trobe University

Convergence rate of wavelet expansions of random processes

18:00-19:00 **Room No. T6**

Chair: Rana Barua

18:00-18:15 P. N. Rathie, Universidade De Brasilia

Fitting several data sets to Levy and generalized t-distributions

18:20-18:35 J. F. López-Fidalgo, University of Castilla-La Mancha

The EM algorithm and optimal designs for mixtures of distributions

18:40-18:55 R. C. Dalang, Ecole Polytechnique Fédérale de Lausanne

Intermittency in a hyperbolic Anderson problem

19:00-20:00 **Room No. T6**

Chair: Rana Barua

19:00-19:15 M. Lee, Yonsei University

Asymptotic and martingale method for a delay financial model

19:20-19:35 R. Böttcher, Fern Universität Hagen

Stochastic growth processes based on random segments

19:40-19:55 E. Shamarova, University of Porto

Solutions of the Navier-Stokes and Burgers equations via forward-backward SDEs

Wednesday, August 25, 2010

15:00-16:00 **Room No. T4**

Chair: Rahul Roy

15:00-15:15 H. C. Taneja, Delhi Technological University

Length biased weighted residual inaccuracy measure

15:20-15:35 R. K. Bajaj, Jaypee University of Information Technology

On restricted fuzzy linear regression using fuzzy entropy

15:40-15:55 N. Gupta, Jaypee University of Information Technology

On some reliability properties of mean inactivity time order under weighing

16:00-17:00 **Room No. T4**

Chair: Rahul Roy

16:00-16:15 C. A. Vivacqua, Universidade Federal Do Rio Grande Do Norte

Comparative study of normal plots for analyzing unreplicated factorial designs

16:20-16:35 N. Sidarova University College, London

Phase transitions for dilute prarticle systems with Lennard-Jones potential

16:40-16:55 W. Li, University of Delaware

Small value probabilities

Friday, August 27

17:00-18:00 **Room No. 1.03**

Chair: R. L. Karandikar

17:00-17:15 A. Karczewska, University of Zielona Gora

Convolution type stochastic Volterra equations in Hilbert space

17:20-17:35 Vikas Kumar, Delhi College of Engineering

On dynamic Renyi cumulative residual entropy measure

17:40-17:55 R. Srivastava, Harish-Chandra Research Institute

Non-additive entropy measure based residual lifetime distributions

14 Combinatorics

Saturday, August 21, 2010

15:00-16:00

Room No. T4

Chair: H. N. Ramaswamy

15:00-15:15 M. Bousquet-Mélou *et al*, University of Antananarivo

Polynomial classes of permutations avoiding exactly two patterns

15:20-15:35 Vasudeva, NIT, Surathkal

Mod difference digraphs

15:40-15:55 J. M. Ash, DePaul University

Balanced tournaments for games

Sunday, August 22, 2010

18:00-19:00

Room No. G01

Chair: B. Waphare

18:00-18:15 A. K. Das, University of Calcutta

Forbidden configuration characterization for interval digraphs/bigraphs

18:20-18:35 E. T. Baskoro, Institut Teknologi Bandung

On Ramsey $(2K_2, P_n)$ minimal graphs

18:40-18:55 V. Murali, Rhodes University

Principle of inclusion-exclusion for finite fuzzy subsets

Tuesday, August 24, 2010

15:00-16:00

Room No. T2

Chair: Vijayakumar Ambat

15:00-15:15 N. Malinina, University of Aerospace Technology

On a principal impossibility to prove $P = NP$

15:20-15:35 E. Ghorbani, Institute for Research in Fundamental Sciences

Graphs with many ± 1 or $\pm\sqrt{2}$ eigenvalues

15:40-15:55 A. Iranmanesh, Tarbiat Modares University

On ordinary generalized geometric-arithmetic index

16:00-17:00

Room No. T2

Chair: Vijayakumar Ambat

16:00-16:15 K. L. Patra, NISER, Bhubaneswar

Minimizing Laplacian spectral radius of unicyclic graphs with fixed girth

16:20-16:35 T. K. Maryati, State Islamic University

Ph-(super) magic labelings of C_{n+p}

16:40-16:55 S. Ghosh, Jadavpur University

Adjacency matrices of probe interval graphs

17:00-18:00

Room No. T2

Chair: Vijayakumar Ambat

17:00-17:15 N. Sridharan, Alagappa University

Γ -half graphs

17:20-17:35 M. G. Rodríguez Sánchez, Universidad Autónoma Metropolitana

Graph reductions using the 4-polygon to 4-star transformation

17:40-17:55 M. Changat, Kerala University

Transit functions of higher arity

18:00-19:00 **Room No. T2**

Chair: **T. Tamizh Chelvam**

18:00-18:15 K. V. S. N. Sarma, Regency Institute of Technology

On certain types of graphs

18:20-18:35 A. Moreno Cañadas, Universidad Nacional De Columbia

On some P -partitions and partitions into four cubes

18:40-18:55 V. Logani, Chiang Mai University

Algorithm for finding the coefficients of rook polynomials

19:00-20:00 **Room No. T2**

Chair: **T. Tamizh Chelvam**

19:00-19:15 S. Bagchi, NIT, Durgapur

Square 2-designs on a new family of binary codes

19:20-19:35 J. E. Pommersheim, Reed College

Sum-integral interpolators and the Euler-Maclaurin formula for polytopes

19:40-19:55 H-H. Lai, National Kaohsiung Normal University

Acyclic list edge coloring of planar graphs without short cycles

Wednesday, August 25, 2010

18:00-19:00 **Room No. G01**

Chair: **Basavanagoud Bommanahal**

18:00-18:15 G. R. Paseman, SDFAE

A different approach to Hadamard's maximum determinant problem: update

18:20-18:35 K-W. Lih, Academia Sinica

Acyclic list edge coloring of graphs

18:40-18:55 B. Waphare, Pune University

On characterization of strong posets

Friday, August 27, 2010

15:00-16:00 **Room No. T2**

Chair: **S. S. Sane**

15:00-15:15 T. Tamizh Chelvam, Manonmaniam Sundaranar University

Domination parameters of circulant graphs

15:20-15:35 A. S. Lakshmanan, St. Xavier's College for Women

On b -perfect graphs and b -chromatic number of regular graphs

15:40-15:55 R. Pawale, University of Mumbai

Characterization of quasi-symmetric designs in terms of residuals of biplanes

16:00-17:00 **Room No. T2**

Chair: **S. S. Sane**

16:00-16:15 V. Shlyk, National Academy of Science of Belarus

Polyhedral approach to integer partitions

16:20-16:35 B. Bommanahal, Karnatak University

On Chainos total-ctree graph of a graph

16:40-16:55 P. Karuvachery, CUSAT

Root graphs of anti-Gallai graphs

17:00-18:00 **Room No. T2**

Chair: **S. S. Sane**

17:00-17:15 D. Sinha, Banasthali University

C -consistency of signed line structures

17:20-17:35 R. S. Bhat, Manipal Institute of Technology

Strong (weak) edge-edge domination number of a graph

17:40-17:55 P-Y. Tsai Academia Sinica

The strong chromatic index of Halin graphs

15 Mathematical Aspects of Computer Science

Friday, August 20, 2010

15:00-16:00

Room No. T6

Chair: C. R. Subramanian

15:00-15:15 V. Kasyanov, Institute of Informatics Systems

Tools for supporting graphs in computer science

15:20-15:35 M. Yunusi, Tajik National University

Model of numbers tree and its application

15:40-15:55 A. Agarwal, Snolr Labs and Carnegie-Mellon University

A logic game for classification of regular languages

16:00-17:00

Room No. T6

Chair: C. R. Subramanian

16:00-16:15 K. V. Babitha,

On soft set relations

16:20-16:35 T. K. Shinoj, NIT, Calicut

Intuitionistic fuzzy multisets

16:40-16:55 S-E. Han

Digital covering theory and its applications

17:00-18:00

Room No. T6

Chair: C. R. Subramanian

17:00-17:15 A. Tkacenko, State University, Moldova

The generalized transportation model of 'bottleneck' type

17:20-17:35 M. J. Vielhaber, HS Bremerhaven/Universidad Austral De Chile
Valdivia

The algebraic IV differential attack AIDA: a cryptanalytic tool

17:40-17:55 P. Girish, NIT, Calicut

Rough multiset and its properties

Tuesday, August 24, 2010

17:00-18:00

Room No. G01

Chair: Jagmohan Tyagi

17:00-17:15 N. Ketu, Homomorphic encryption scheme

17:20-17:35 M. R. Valluri, Salalah College of Technology

A message authentication code based on quasigroups

17:40-17:55 A. Pal, NIT, Durgapur

The conditional covering problem on unweighted interval graphs with nonuniform coverage radius

18:00-19:00

Room No. G01

Chair: Jagmohan Tyagi

18:00-18:15 M. Pal, Vidyasagar University

L(2, 1)-labelling of cactus graphs

18:20-18:35 S. Sharan, Indian School of Mines

L-valued automata and associated topology

18:40-18:55 S. R. Ghorpade, IIT, Mumbai

Affine Grassmann codes

19:00-20:00

Room No. G01

Chair: **Jagmohan Tyagi**

19:00-19:15 M. Garg, IIT, Roorkee

Fourth-order nonlinearity of monomial partial spread function on 10 variables

19:20-19:35 C. Surapholchai, Chulalongkorn University

Proving easy programming languages by denotational semantics

19:40-19:55 B. Wen, Tianjin University of Commerce

Answer to question P/NP is $P \neq NP$

Thursday, August 26, 2010

17:00-18:00

Room No. G01

Chair: **Sudhir R. Ghorpade**

17:00-17:15 G. Ganesan, Adikavi Nannaya University

Various operators on rough fuzzy groups - an impact on information systems

17:20-17:35 S. Devdas, Government Arts College (Autonomous), Coimbatore

A note on ambiguous probabilistic deterministic finite state automata

17:40-17:55 D. Haridas et al, Advanced Data Processing Research Institute

Application of non-associative algebraic structure: quasigroup to cryptography

16 Numerical Analysis and Scientific Computing

Friday, August 20, 2010

15:00-16:00

Room No. 1.04

Chair: B. V. Ratish Kumar

15:00-15:15 V. Thynesh, Bharathidasan University College

Parameter-uniform numerical method for singularly perturbed differential equations with discontinuous data

15:20-15:35 H. Ponnamma Rani, N. I. T., Warangal

Hydrodynamic stability of free convection from an inclined elliptic cylinder in couple stress fluid

15:40-15:55 P. Manchanda, Guru Nanak Dev University

Vector-valued wave packets

16:00-17:00

Room No. 1.04

Chair: B. V. Ratish Kumar

16:00-16:15 A. B. Bagayogo, CUSB, Canada and INS, Bonn

Discrete element method for granular flow and cracks propagation

16:20-16:35 Arshad Khan, Jamia Millia Islamia

Parametric septic splines approach to the solution of sixth order two-point boundary value problems

16:40-16:55 S. M. Quraishi, Institute of Technology

A second generation wavelet based approach for multiscale solution of biharmonic plate equation

17:00-18:00

Room No. 1.04

Chair: B. V. Ratish Kumar

17:00-17:15 R. Narasimhan, Bharathidasan University

Uniformly convergent numerical method for singularly perturbed second order ordinary delay differential equations of convection-diffusion type

17:20-17:35 V. Bokil, Oregon State University

Maxwell's equations in dispersive media

17:40-17:55 N. L. Gibson, Oregon State University

Polynomial chaos approach for approximating Cole-Cole dispersive media

Saturday, August 21, 2010

18:00-19:00

Room No. 1.05

Chair: N. L. Gibson

18:00-18:15 S. Dey, ICFAI University

Newtons forward difference interpolation formula - extended

18:20-18:35 B. Panigrahi, IIT, Kharagpur

Richardson extrapolation of discrete projection method for eigenvalue problem of a two-dimensional compact integral operator

18:40-18:55 Shuvam Sen, Tezpur University

Biharmonic computation of the flow past an impulsively started circular cylinder

Sunday, August 22, 2010

15:00-16:00

Room No. 1.04

Chair: **R. H. Nochetto**

15:00-15:15 G. M. Amirali, Sinop University

A parameter-uniform difference method for a singularly perturbed three-point boundary value problem

15:20-15:35 J. J. H. Miller, Trinity College, Dublin

A fitted mesh method for a partially singularly perturbed linear system of time dependent reaction-diffusion equations

15:40-15:55 Natesan Srinivasan, IIT, Guwahati

Parameter-uniform hybrid numerical scheme for singularly perturbed problems of mixed parabolic-elliptic type

16:00-17:00

Room No. 1.04

Chair: **R. H. Nochetto**

16:00-16:15 Ramesh Babu, Bharathidasan University

Streamline-diffusion finite element method for singularly perturbed coupled elliptic-elliptic transmission boundary value problem

16:20-16:35 H. Li et al, Syracuse University

Analysis of the finite element method for the Neumann and transmission problems

16:40-16:55 V. Vivek,, IIT, Kanpur

Finite element analysis of three-step Taylor-Galerkin approximation for singularly perturbed convection-diffusion equation

17:00-18:00

Room No. 1.04

Chair: **P. A. Markowich**

17:00-17:15 V. K. Kukreja et al, SLIET, Longowal

Solution of axial dispersion model using orthogonal Hermite collocation method

17:20-17:35 Murali Krishna et al, NIT, Warangal

Septic B-spline collocation method for sixth order boundary value problems

17:40-17:55 G. Arora/R. C. Mittal, IIT, Roorkee

Numerical solution of the Swift-Hohenberg equation using quintic B-spline collocation method

18:00-19:00

Room No. 1.04

Chair: **P. A. Markowich**

18:00-18:15 S. Bisht, Amity University, Lucknow Campus

An adaptive cubic spline approach to solve a second order singularly perturbed boundary value problem

18:20-18:35 R. K. Sharma/R. Bhargava, IIT, Roorkee

Unsteady MHD mixed convection heat transfer over a stretching surface embedded in a porous medium with heat source/sink using mesh-free method

18:40-18:55 M. M. Gupta, The George Washington University

A compact stream function-velocity method for incompressible viscous flows

Tuesday, August 24, 2010

18:00-19:00

Room No. 1.05

Chair: Natesan Srinivasan

18:00-18:15 R. I. McLachlan, Massey University

Multisymplectic integrators for Hamilton wave equations

18:20-18:35 C. J. Gonzales Fernandez, University of Valladolid

Exponential type integrators for abstract quasilinear parabolic equations with variable domains

18:40-18:55 S. Challa, IIT, Hyderabad

Compressive sampling techniques and their application to data regularization

19:00-20:00

Room No. 1.05

Chair: Natesan Srinivasan

19:00-19:15 M-H. Chen, National Cheng Kung University

A high order discontinuous Galerkin method for elliptic interface problems

19:20-19:35 Sharath Babu NIT, Warangal

Artificial diffusion-convection problem in one dimension: a computational approach

19:40-19:55 K. I. Kim Pohang University of Science and Technology

A H-splitting decoupled scheme for a transient eddy current problem over an unbounded domain

Wednesday, August 25, 2010

15:00-16:00

Room No. 1.05

Chair: J. Xu

15:00-15:15 S. Xiang et al, Central South University

Clenshaw-Curtin-Filon-type method for highly oscillatory Bessel transforms and applications

15:20-15:35 A. H. Siddiqi, Aligarh Muslim University and Sharda University

Wavelets associated with non-uniform vector-valued multiresolution analysis

15:40-15:55 R. G. Campos et al, Universidad Michoacana

XFT: a fast discrete fractional Fourier transform

16:00-17:00

Room No. 1.05

Chair: J. Xu

16:00-16:15 A. Marica, Ikerbasque, Basque Foundation for Sciences

High frequency localized solutions and filtering mechanisms for classical and non-conforming semi-discretizations of the wave equation

16:20-16:35 E. R. Oberaigner, University of Leoben

An integral equation approach to solve time-dependent heat conduction problems

16:40-16:55 S. Krishna Murthy, IIT, Kanpur

Darcy mixed convection in a fluid saturated 3D porous enclosure with a centrally buried isothermal cubical structure under suction effect

17:00-18:00

Room No.1.05

Chair: J. Xu

17:00-17:15 A. Patel, The LNM Institute of Information Technology

Lagrange multiplier method with penalty for elliptic interface problems

17:20-17:35 N. Temirgaliyev, L. N. Gumilyov Eurasian National University

The exact orders of the computational widths

17:40-17:55 I. Amirali (Amiraliyeva), Sinop University

Difference schemes for singularly perturbed boussinesq system

Friday, August 27, 2010

15:00-16:00

Room No. 1.05

Chair: **Rajen Sinha**

15:00-15:15 D. S. Dilip, Sacred Heart College

Sums of reciprocal of generalize factorial

15:20-15:35 J. R. Sharma/R. K. Guha, Sant Longowal Institute of Engineering and Technology

An efficient root-finding method with eighth-order convergence

15:40-15:55 K. Srinivasan et al, Sacred Heart College

Properties of infinite series solutions of second order generalized difference equation

16:00-17:00

Room No. 1.05

Chair: **Rajen Sinha**

16:00-16:10 F. de la Hoz, University of the Basque Country

Numerical study of a geometric flow of curves that develop singularities in finite time

16:20-16:35 E. Alberdi et al, UPV/EHU

Reasons why the ODE45 performs better than the ODE15s in some stiff problems

16:40-16:55 P.S. Rao, Indian School of Mines

Efficiency of direct parallel algorithm applied to thermohydrodynamic lubrication

17:00-18:00

Room No. 1.05

Chair: **Rajen Sinha**

17:00-17:15 S. Das, Institute of Chemical Technology

Numerical studies of thermal stratification in a cylindrical vessel

17:20-17:35 G. Awanou, Northern Illinois University

Good numerical solutions of fully nonlinear elliptic equations

17 Control Theory and Optimization

Wednesday, August 25, 2010

17:00-18:00

Room No. 1.06

Chair: K. Balachandran

17:00-17:15 J. Dutta, IIT, Kanpur

Revisiting optimality conditions in convex programming

17:20-17:35 R. P. Agdeppa, Mindanao University of Science and Technology

More realistic mathematical models of traffic equilibria

17:40-17:55 E. Rentsen, National University of Mongolia

Some method and algorithm for solving DC programming

18:00-19:00

Room No. 1.06

Chair: K. Balachandran

18:00-18:15 F. Flores-Bazán, Universidad De Concepción

Characterizing the lagrangian strong duality in constrained non-convex optimization

18:20-18:35 S. Bhattacharya, Tripura University

Some study on fuzzy control theory: special attention on queuing control at air and rail traffic network

18:40-18:55 M. R. Nagalakshmi, Nirmala College

Optimization of vehicle routing problem with stochastic demand by variant of ant algorithm

Thursday, August 26, 2010

15:00-16:00

Room No. 1.02

Chair: H. Frankowska

15:00-15:15 V. Obukhovskiy, Voronezh State University

Topological methods in controllability problems for some classes of systems governed by differential inclusions in Banach spaces

15:20-15:35 G. Haeser, University of Sao Paulo

Sequential optimality conditions for smooth constrained optimization

15:40-15:55 M. Barbero Linan, Queen's University

High order sufficient conditions for tracking some mechanical control problems

16:00-17:00

Room No. 1.02

Chair: H. Frankowska

16:00-16:15 A. Dhara, IIT, Kanpur

Approximate optimality conditions for minimax programming problems

16:20-16:35 Surendra Kumar, IIT, Roorkee

Controllability of second order Volterra integro-differential equations with non-local conditions

16:40-16:55 T. Tadumadze, Tbilisi State University

On the optimality of the initial data for delay differential equations

17:00-18:00

Room No. 1.02

Chair: S. Iwata

17:00-17:15 S. Atreya, D. N. College, Meerut

Partial outsourcing in a two warehouse supply chain production inventory model

17:20-17:35 A. A. Khan, Rochester Institute of Technology

Inverse problems for ill-posed variational and quasivariational inequalities

17:40-17:55 S. J. Yang, Yonsei University

Asymptotic analysis of portfolio optimization with stochastic volatility

18:00-19:00 **Room No. 1.02**

Chair: S. Iwata

18:00-18:15 S. D. Jabeen/R. N. Mukherjee, University of Burdwan

Vibration control of a vehicle with passengers using hybrid genetic algorithm

18:20-18:35 M. George et al, Mar Ivanios College

A new solution concept of matrix games in fuzzy environment

18:40-18:55 T. Parreira/A. Pinto, University of Porto

Hotelling model with uncertainty on the production cost and networks

19:00-20:00 **Room No. 1.02**

Chair: S. Iwata

19:00-19:15 K. Balachandran, Bharathiar University

Controllability of nonlinear fractional integrodifferentiable systems

Friday, August 27, 2010

15:00-16:00 **Room No. 1.02**

Chair: Q. H. Ansari

15:00-15:15 M. K. Srivastava, University of Delhi

Approximate controllability of non-densely defined first order semilinear integro-differential control systems

15:20-15:35 K. Manthripragada, National Institute of Ocean Technology

Time for un-doing! - What is the mantra? Inversion techniques and optimization

15:40-15:55 A. K. Bhunia, University of Burdwan

GA based reliability optimization in stochastic domain

16:00-17:00 **Room No. 1.02**

Chair: Q. H. Ansari

16:00-16:15 H. P. Singh, IIT, Roorkee

An adaptive tracking control of robot manipulators in task-space under uncertainties using neural network

16:20-16:35 N. K. Son, Vietnam Academy of Science and Technology

The structured distance to non-surjectivity and its application to calculating the controllability radius of linear systems under multi-perturbations

16:40-16:55 C. O. Kiselman, Uppsala University

Local minima, marginal functions and separating hyperplanes in discrete optimization

17:00-18:00 **Room No. 1.02**

Chair: Q. H. Ansari

17:00-17:15 Z. J. Bartosiewicz, Bialystok University of Technology

Local observability of analytic systems on time scales

17:20-17:35 L. Lelevkina, Kyrgyz Russian Slavic University

Optimal control of the inductive heating process of oil-well casing in cold, intermediate and hot modes

17:40-17:55 A. Belmiloudi, INSA, Rennes

Regulation of uncertain nonlinear systems : a differential equation approach to robust control design with applications to biological systems

18 Mathematics in Science and Technology

Saturday, August 21, 2010

16:00-17:00

Room No. 1.04

Chair: J. J. H. Miller

16:00-16:15 R. K. Bhattacharya, Calcutta University

On wave propagation in a random conducting magneto-generalized thermo-viscoelastic medium

16:20-16:35 T. Bhusal, IIT, Kanpur

Steven H. Strogatz and problem in nonlinear dynamics

16:40-16:55 B. Booss, Roskilde University

Intra-cellular control of insulin secretion

17:00-18:00

Room No. 1.04

Chair: J. J. H. Miller

17:00-17:15 U. Gupta, Panjab University

Effect of Hall currents and permeability on double diffusive convection of compressible Rivlin-Eriksen fluid in rotation

17:20-17:35 P. Andharia, Bhavnagar University

Effect of longitudinal roughness on magnetic fluid based squeeze film between truncated conical plates

17:40-17:55 S. S. Sanasam, Pachhunga University College, Mizoram University

Love wave at a layer medium bounded by irregular boundary surfaces

18:00-19:00

Room No. 1.04

Chair: J. J. H. Miller

18:00-18:15 S. Cuadrado Univesridad Autonoma De Barcelona

On a cylin structures cell population model

18:20-18:35 S. Varadaraj,

Derivation and geometric proofs of corollaries of the developable surface equations and industrial applications

18:40-18:55 S. Hazra, TU-Darmstadt

PDE constrained optimization in application

Tuesday, August 24, 2010

15:00-16:00

Room No. 1.02

Chair: A. H. Siddiqi

15:00-15:15 A. Bandyopadhyay, Khalisani Mahavidyalaya

Analytical solution of long waves generated by bottom motion on a beach with variable slope

15:20-15:35 C. Nagaiah, University of Graz

Efficient and accurate numerical solution for optimal control of reaction-diffusion systems in cardiac electrophysiology

15:40-15:55 Yajuvindra Kumar, IIT, Roorkee

Effect of nonhomogeneity on free transverse vibration of orthotropic equilateral triangular plates with linerly varying thickness

16:00-17:00

Room No. 1.02

Chair: **A. H. Siddiqi**

16:00-16:15 A. S. R. Srinivasa Rao, Indian Statistical Institute, Kolkata

The role of mathematical models in epidemic control and policy in India

16:20-16:35 C. Escudero Liebana, Consejo Superior De Investigaciones Cientificas

Stochastic growth of radial clusters: weak convergence to the asymptotic profile and implications for morphogenesis

16:40-16:55 S. A. Sahu, Indian School of Mines

Propagation of sh waves in multilayered viscoelastic medium: a finite difference approach

17:00-18:00

Room No. 1.02

Chair: **A. H. Siddiqi**

17:00-17:15 R. J. Sanchez Garcia, Heinrich Heine Universität Dusseldorf

Structure in spectral characteristics in network redundancy

17:20-17:35 S. Baiculescu, Interdisciplinary Commission of Romanian Academy

Mathematical aspects in complexity of biological, neuropsychological and psychological systems

17:40-17:55 B. C. Neog, Jagiroad College

Thermal stratification and radiation effects on MHD free convection flow past an impulsively started infinite vertical plate

18:00-19:00

Room No. 1.02

Chair: **Akhtar Khan**

18:00-18:15 A. T. Eswara, P. E. S. College of Engineering

MHD flow due to a point sink with localized wall heating (cooling)

18:20-18:35 P. R. Sharma, University of Rajasthan

Effect of suction/injection and viscous dissipation on unsteady heat transfer in steady stagnation point flow through porous media

18:40-18:55 G. Singh, Birla Institute of technology Ranchi (Ext. Centre, Jaipur)

A non-isothermal permeable vertical plate in presence of heat source/sink and chemically reacting species

19:00-20:00

Room No. 1.02

Chair: **Akhtar Khan**

19:00-19:15 G. Shyshkanova, Zaporozhye National Technical University

Integral equation solution for multi-connected contact domain under non-symmetric loading

19:20-19:35 D. K. Phukan, Moran College

Analytical solution for axi-symmetric rotating flow of Newtonian conducting fluid past a stretching porous sheet under a transverse magnetic field

19:40-19:55 N. Kaur, Thapar University

Modelling the spread of HIV in a stage structured population; effect of awareness

Thursday, August 26, 2010

15:00-16:00

Room No. 1.04

Chair: **P. Manchanda**

15:00-15:15 M. Kanoria, University of Calcutta

Use of state-space and eigenvalue approaches in two temperature generalized thermoelasticity in presence of a spherical cavity

15:20-15:35 A. Arora, Kanya Mahavidyalaya, Jalandhar

The effect of pore alignment on seismic reflection amplitudes

15:40-15:55 B. S. Mudagi, Nowrosjee Wadia College

An investigation into effect of electromagnetic fields on generalized Couette flow with heat transfer

16:00-17:00

Room No. 1.04

Chair: P. Manchanda

16:00-16:15 S. E. Guseynov, Institute of Mathematical Sciences and Information Technologies

Inverse problems for PDE and ODE systems with incomplete information originated in molecular biology

16:20-16:35 R. K. Deka, Gauhati University

Stability of narrow gap Taylor-Dean flow with radial heating: stationary critical modes

16:40-16:55 M. K. Sharma, Guru Jambheshwar University of Science and Technology

Pulsatile two phase flow model of blood through stenosed artery

17:00-18:00

Room No. 1.04

Chair: C. Schuette

17:00-17:15 Sanjeev Kumar, Government College, Mandi

Effect of suspended particles on thermosolutal instability in elastico-viscous Rivlin-Eriksen fluid

17:20-17:35 S-H. Park, Yonsei University

Asymptotic option pricing under the CEV diffusion

17:40-17:55 B. M. Paz Mendez de Oliveira, FCNAUP and LIAAD

Immune response dynamics by T cells

18:00-19:00

Room No. 1.04

Chair: C. Schuette

18:00-18:15 O. D. Makinde Cape-Peninsula University of Technology

Thermal stability of a strong exothermic chemical reaction in cylindrical pipe with variable thermal conductivity and heat loss

18:20-18:35 G. Chattopadhyay, Pailan College of Management and Technology

Correspondence between monsoon rainfall over India and sunspot numbers: a view through spectral analysis and neural network

18:40-18:55 M. Mishra, IIT, Ropar

Mathematical modelling of the sample solvent effects on the chromatography peak shape of analytes

Friday, August 27, 2010

15:00-16:00

Room No. 1.04

Chair: K. I. Kim

15:00-15:15 H. I. Ferreira, University of Minho

Modelling human decisions with game theory

15:20-15:35 R. Mondal, IIT, Kharagpur

An expansion formula for wave structure interaction problems in three dimensions

15:40-15:55 S. Lalwani, Birla Institute of Scientific Research

Using ABS algorithm to schedule medical residents

16:00-17:00

Room No. 1.04

Chair: K. I. Kim

16:00-16:15 O. Prozorov, St. Petersburg Department of the Steklov Institute of Mathematics

Topologies and sheaves in linguistics

16:20-16:35 Prashant Kumar, Pohang University of Science and Technology
A moored ship motion analysis with the resonant frequency waves in the POSCO New Harbour

16:40-16:55 A. Adrego Pinto, University of Porto

Universality in the financial market

17:00-18:00

Room No. 1.04

Chair: K. I. Kim

17:00-17:15 S. Arora, SLIET, Longowal

Modelling of washing zone of Brown stock washer

17:20-17:35 L. M. Ferreira et al, FCNAUP and LIAAD

R & D dynamics on costs

17:40-17:55 Sunil Mathew, NIT, Calicut

A novel method of cancer detection

19 Mathematics Education and Popularization of Mathematics

Thursday, August 26, 2010

15:00-16:00

Room No. 1.05

Chair: Shailesh Shirali

15:00-15:15 Ajit Kumar, Ajit Kumar Institute of Chemical Technology

Mathematics training and talent search programme

15:20-15:35 M. M. Garcia Pupo, Universidad Antonio Noriño

A dialectical invariant for a didactic approach of mathematics

15:40-15:55 M. N. Pourkazemi, Shahid Beheshti University

Application of mathematics in economics and management and the appropriate method for teaching mathematics in these fields

16:00-17:00

Room No. 1.05

Chair: Shailesh Shirali

16:00-16:15 U. Malaspina, Pontifica Universidad Catolica De Peru

Intuition and optimization problems in the teaching-learning processes in basic education

16:20-16:35 W. Ogana, University of Nairobi

Promoting mathematics in Africa: AMMSI perspective

16:40-16:55 L. Radhakrishna, Bangalore University

Principles of professional writing

17:00-18:00

Room No. 1.05

Chair: Shailesh Shirali

17:00-17:15 H. V. Jain, Devi Ahilya University

Practical approach in mathematics education

17:20-17:35 N. D. Calkins, Dominican University of California

Cave man math

17:40-17:55 S. Dey, ICFAI University

The unique calendar

Friday, August 27, 2010

15:00-16:00

Room No. T3

Chair: S. Pattanayak

15:00-15:15 F. Ronning, Norwegian University of Science and Technology

How artefacts, motives and goals influence the content of mathematical discourse

15:20-15:35 M. Mallikarjuna Rao, Princeton Degree College

A framework for internet based teaching and learning mathematics

15:40-15:55 R. Desfitri, University of Bung Hatta

Students' algebraic thinking in middle school level

16:00-17:00

Room No. T3

Chair: S. Pattanayak

16:00-16:15 K. Pjanic, University of Sarajevo

The role of teaching and learning settings in solving ordinary differential equations in various contexts

16:20-16:35 C. Fernandez Sanchez, Colegio De Bachilleres Del Estado De Tlaxcala México

Teaching strategy adaptation of the Ishikawa's cause-effect diagram for math problems

16:40-16:55 A. H. Durfee, Mount Holyoke College

Polyhedral differential geometry

20 History of Mathematics

Sunday, August 22, 2010

16:00-17:00

Room No. T6

Chair: T. H. Kjeldsen

16:00-16:15 A. M. Hinz, LMU, Munich

The uncountability of the real numbers

16:20-16:35 M. B. Dhakne, Dr. Babasaheb Ambedkar Marathwada University

A look at some research work of B. G. Pachpatte

16:40-16:55 G. R. De Young, The American University in Cairo

Early printed Arabic geometry textbooks

17:00-18:00

Room No. T6

Chair: T. H. Kjeldsen

17:00-17:15 R. Murawski, Adam Mickiewicz University

Beginnings of set theory in Poland

17:20-17:35 I. Bondecka-Krzykowska, Adam Mickiewicz University

Slonimski's theorem and its implementation in the calculating machine

17:40-17:55 P. Taneja, Gurukul Kangri University

Methods of interpolation in Indian astronomy

18:00-19:00

Room No. T6

Chair: T. H. Kjeldsen

18:00-18:15 S. Zhang, Shandong University

Euclid's number theoretic work

18:20-18:35 M. C. Singh, University of Calgary

Mathematical concepts, axioms the logic and some of its results viewed from the philosophical knowledge of North Indian saints

18:40-18:55 Y. H. Kye, Kosin University

Some differences in mathematics and art of the west and orient

Friday, August 27, 2010

15:00-16:00

Room No. T6

Chair: N. Schappacher

15:00-15:15 A. B. Padmanabha Rao, Walchand College of Arts and Science

The relevance of Bhaskara's methods in the present context

15:20-15:35 M. T. Borgato, University of Ferrara

Residual analysis versus analytical functions

15:40-15:55 L. Pepe, University of Ferrara

Numerical analysis in the 18th century: the Euler-Mascheroni constant

16:00-17:00

Room No. T6

Chair: N. Schappacher

16:00-16:15 N. Shivakumar, R. V. College of Engineering

Jaina mathematician of canonical group

16:20-16:35 S. L. Singh, Gurukula Kangri Vishwavidyalaya

Vedic binary systems and Fibonacci numbers

16:40-16:55 O. J. Abdounour, Instituto de Matematica da USP

Mathematics and music, a historical approach on a scientific dissemination context

Mathematical Software

Wednesday, August 25, 2010

Room No. 1.04

Chair: S. Kumaresan

15:00 - 15:15

MS1 Raazesh Sainudiin

A C++ class library for statistical set processing

15:20 - 15:35

MS2 Vembu

Graphsoft

15:40 - 15:55

MS3 Tatsuyoshi Hamada

KNOPPIX/Math: Open source desktop environment for mathematics

16:00 - 16:15

MS4 William Stein-Sage

Creating a Viable Open Source Alternative to Magma, Maple, Mathematica, and Matlab