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**
17:20-17:35 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, Zhangzou 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 ringswith 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 A. Khaksari, Payam-E-Noor University
Generalization of prime ideals and prime submodules

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 $\mathbf{L}_{32}(2)$ 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 Asma Ali, Aligarh Muslim University
Derivations on prime near ring
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
16:40-16:55 I. G. Segida
Full classic solution to the cubic equation

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

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 Buones 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 Erdös-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

19:00-20:00   Room No. T1
Chair: **C. S. Dalawat**
19:00-19:15 A. Tripathi, IIT
Exact results for the Frobenius problem in three variables

Tuesday, August 24, 2010

15:00-16:00   Room No. T1
Chair: **A. Ivic**
15:00-15:15 V. J. Mejeia Huguet, 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 $\zeta(-n, \alpha), \zeta_r(-n_1, -n_2, -n_3, ..., -n_r), \zeta(n), L(n, \chi)$

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-dimensioanl 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 K. Srinivasa Rao, Institute of Mathematical Sciences
Multiplicative Diophantine equation
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. Kozlowska-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, IIIT, 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 P4
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 dulaity 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-Altaisk University
Structure and rigidity of self-similsr 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-Caratheodory 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

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. Albujer 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

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. Gangopadhay, 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 Istitute 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: **B. Datta**
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: **B. Datta**
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

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 $\delta s \Pi$ 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 albegra 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

19:00-20:00 Room No. 1.03

Chair: **Ratikanta Panda**
19:00-19:15 Ibragimov, Zafar, Urgench State University
Quasianalytic functions of several variables in the sense of Gonchar
19:20-19:35 Ibragimov, Zair, California State University
A canonical δ-hyperbolic metric for metric spaces

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 $\lambda - \mathrm{bv}(\mathrm{p})$ and $\phi - \lambda - \mathrm{bv}$
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 Graduatae 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 A. L. Pathak, Brahmanand College
Subclass of harmonic univalent functions associated with derivative operator
18:20-18:35 P. A. Hagelstein, Baylor University
Recent developments regarding the Halo conjecture
18:40-18:55 V. Manojlovic Faculty of Organizational Science, serbia

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. Memic, 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 S. K. Vodopyanov, Sobolev Institute of Mathematics

L_p *spaces of differentiable forms and mappings with controlled distortion*

Friday, August 27, 2010

15:00-16:00 Room No. T4

Chair: **B. S. Komal**

15:00-15:15 E. Shcherbakov, Kuban State University

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

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

Certain generalized classes of p-valent analytic functionsinvolving 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 S. George, Mangalore University

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

9 Functional Analysis and Applications

Saturday, August 21, 2010

15:00-16:00 Room No. T3

Chair: **G. P. Youvaraj**
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: **G. P. Youvaraj**
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-hypernormal operator
18:40-18:55 B. S. Thakur, IIT, Bombay and UM-DAE CBS, Mumbai
Iterative method for finite family of hemicontractive mappings

19:00-20:00 Room No. T3

Chair: **Subhash Bhatt**
19:00-19:15 M. Sal Moslehian, Ferdowsi University of Mashhad
Refinements of operator Jensen's inequality
19:20-19:35 G. V. Ravindranadh Babu, Andhra University
Existence of common fixed points for a pair of generalized weakly contractive maps

Tuesday, August 24, 2010

15:00-16:00 Room No. T3
Chair: **T. S. S. R. K. Rao**
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 V. Burenkov Eurasian National University
Recent progress in the problem of spectral stability estimates for elliptic operators
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
16:40-16:55 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 Metroploitana - Itzapalapa
The N-body problem in spaces of negative curvature
17:40-17:55 K. D. Kucche, Shivaji University
Global existence for Volterra-Fredhölm 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 componentsof 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 mero-morphic 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 co-efficients

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 V. A. Cherikuri, B. M. Birla Science Centre
The ultra relativistic Maxwell and Proca 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 ina 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. A. Arango Cabarcas, Universidad Del valle
Critical points of solutions to elliptic problems in planar domains
16:20-16:35 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
16:40-16:55 B. Y. Alvarez Samaniego, Escuela Superior Politécnica Del Litoral
Some mathematical results for the Fowler equation

17:00-18:00 Room No. T5

Chair: **A. K. Nandakumaran**
17:00-17:15 C. P. P. Arceo, University of The Philippines
The comparison principle in generalizing the solvability of a nonlinear parabolic 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 N. Mamadaliev, National University of Uzbekhistan
Triccomi problem for the elliptic-hyperbolic equation of the second kind

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 pertirbations 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 Stkes' 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 R. Duduchava, Tbilisi State University
Equivalent regularization of Maxwell's equations

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 T. S. Kalmenov, Institute of mathematics, Computer Science and Mechanics

Determination of structure spectrum for regular arbitrary differential equations and spectral properties of the Newton potential

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

18:00-19:00 Room No. T6

Chair: **T. Amaranath**

18:00-18:15 A. S. Idowu, University of Ilorin

Vibrational analysis of prestressed structure carrying an added mass

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
15:40-15:55 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
16:40-16:55 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, Clermond-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 emmbedded 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 B. Lakshmi, J. N. T. University

Chaotic dynamics in some pendulum type 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 staistical 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-Helmhotz instability

17:40-17:55 O. P. Suthar, Jai Narain Vyas University

Effect of g-jitter on the onset of thermosolutal viscoelastic covection 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 univrsal 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 R4 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, Pontifica 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 interdecision 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

19:40-19:55 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

15:40-15:55 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 praticle systems with Lennard-Jones potential

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

14 Combinatorics

Saturday, August 21, 2010

15:00-16:00   Room No. T4
Chair: **H. N. Ramaswamy**
15:00-15:15 F. Rakotondrajao, 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 (2K2,Pn) minimal graphs
18:40-18:55 V. Murali, Rhodes University
Principle of inclusion-exclusion for finite fuzzy subsets

19:00-20:00   Room No.G01
Chair: **B. Waphare**
19:00-19:15 R. S. Bhat, Manipal Institute of Technology
Strong (weak) edge-edge domination number of a graph
19:20-19:35 O. Ghayour, University of Pune
Distribution networks a generalization to graphs: more applications less fuzzification

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 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
Provinf 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
Paramentric 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 sove 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**
15:20-15:35 R. K. Guha, Sant Longowal Institute of Engineering and Technology
An efficient root-finding method with eighth-order convergence

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
17:40-17:55 J. R. Sharma, Sant Longowal Institute of Engineering and Technology
Fourth order weighted Newton method for computing simple and multiple roots

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 hybdrid genetic algorithm

18:20-18:35 K.Leena Kumari, 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

19:20-19:35 O. M. Bamigbola

An efficient and convergent conjugate gradient method for unconstrained non-linear optimization

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 fluyid based squeeze film between truncated conical plates
17:40-17:55 S. S. Sanasam, Pachhunga University College, Mizoram University
Love wave at a loyer 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-Darmstädt
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 and spectral characteristics in network redundancy
17:20-17:35 S. Baiculescu, Interdisciplinary Commission of Romanian Academy
Mathematical aspects in complexity of biological, neuropsycological 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 sinkwith 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-spce and eigenvalue approaches in two temperature generlized 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. Prosorov, 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**
18:20-18:35 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

19:00-20:00   Room No. T6
Chair: **T. H. Kjeldsen**
19:00-19:15 O. J. Abdounour, Instituto de Matematica da USP
Mathematics and music, a historical approach on a scientific dissemination context

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

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