International Congress of Mathematicians

ICM 2010

August 19 - 27, 2010

Hyderabad, India

Poster Sessions

Poster Session 1

Saturday, August 21, 2010

15:00-17:00 Hall 2

Section 1: Logic and Foundations

A. Sukhotin, Tomsk Polytechnic University
Axiom of choice and Euclid axiom 8
D. Nicolae, Titu Maiorescu University
The subtle sets theory (SST) - theorectical concepts

Section 10: Dynamical Systems and Ordinary Differential Equations

M. A. Darwish, Alexandria University at Damanhour
On a perturbed quadratic fractional integral equation of Abel type
C. A. Maquera Apaza, Universidad De Sao Paulo
On integrable codimension-one Anosov actions of $\mathbb{R}^k$
F. M. F. Elsabaa, Faculty of Education, Egypt
A. Madzvamuse, University of Sussex
Stability analysis of non-autonomous reaction-diffusion systems: the effect of growing domains
R. Celeste, University of The Philippines
Digraphs of unimodal cycles
S. Kryzhevich, St. Petersburg State University
Chaos near non-hyperbolic equlibria or non-traversal homoclinic points
J. M-S. Lubuma, University of Pretoria
Stability analysis and dynamics preserving non-standard finite difference schemes for a malaria model

Section 11: Partial Differential Equations

J. Hyosuk, Chonnam National University
Some results on the global existence to the Navier-Stokes equations
N. Karjanto, University of Nottingham, Malaysia Campus
Numerical simulation of surface wave group propagation over slowly varying bottom
M. Del Mar Gonzalez, Universidad Politecnica De Catalunya
Global existence and uniqueness of solutions to a model of price formation
M. Molati, National University of Lesotho
Invariant solutions of the mixed Korteweg de Vries equation arising in stratified fluids
M. Kwak, Chonnam National University
Regularity for 3D Navier-Stokes equations with large data

Section 13: Probability and Statistics

F. G. Maria De Las Mercedes, UCLM
An application of the response surface methodology (RSM) to the production of pectynolitic enzymes
X. Bardina, Universidad Autònoma De Barcelona
Weak convergence for the stochastic heat equation driven by Gaussian white noise
M. Kaur, Thapar University
Reliability analysis of preventively maintained system using finite element method

Section 14: Combinatorics

K. Dalvi, College of Engineering, Pune
Forbidden-minor characterization for the class of graphic element splitting matroids
V. V. P. R. V. B. Suresh Dara, C. R. Rao AIMSCS, Hyderabad
Dynamics of spanning tree graph operator
S. A. R. Ashrafi Ghomroodi, University of Kashan
The graph equation $Sz(G) = W(G) + k$ and an application in nanoscience
Y. M. Borse, University of Pune
On connected splitting matroid
Nurdin, Hasanuddin University
The total vertex irregularity strength of an amalgamation of stars
G. Seitz, Vienna University of Technology
On the number of inversions in simply generated trees
G. Jacob Victor, JNTU, Hyderabad
An explicit acyclic edge colouring algorithm for a class of complete graphs using near-one factors
P. Csikvari, Eotvos Lorand University
Integral trees of arbitrarily large diameter
F. Shaveisi, K. N. Toosi University of Technology
Minimal prime ideals and cycles in annihilating-ideal graphs
R. Nikandish, K.N. Toosi University of Technology
On the clique and chromatic number of the annihilating-ideal graph
M. Ghanbari, K. N. Toosi University of Technology
On the colouring of the Steiner triple system
S. Zare, Amirkabir University of Technology
Zero-sum flows in graphs
Z. Rezaii, Islamic Azad University, Ardabil Branch
Recursion neural networks for processing directed graphs

Section 17: Control Theory and Optimization

T. Xuan Duc Ha, Hanoi Institute of Mathematics
The Ekeland variational principle for set-valued maps involving coderivatives
H. Dem, Banasthali University
Optimal economic production quantity policy for an imperfect production system of ameliorating items
Z. A. Stempien, The Technical University of Lodz
On the optimal control problem and Galerkin approximation for an extensible beam equation
A. M. Debinska-Nagorska, Technical University of Lodz
Comparison of two hemivariational control problems and convergence of their Galerkin approximation
F. J. Aragon Artacho, University of Alicnte
Proximal point method under metric regularity
A. Just, Technical University of Lodz
Optimal control problem of some hemivariational inclusions - Galerkin approximation
I. C. Da Silva Duarte, University of Minho
Optimal life insurance, consumption and investment

B. S. Lee,
Optimal control applied to the Ecstasy model with peer pressure
M. H. Farahi, Ferdowsi University of Mashhad
Measure theory approach in sliding mode control for nonlinear systems with disturbances
Mohit Singh, Meerut Institute of Technology
An inventory model for fair services of internet traffic

Section 18: Mathematics in Science and Technology

A. K. Singh,, Indian School of Mines
Shear wave propagation in a heterogeneous irregular monoclinic medium
K. Rubtsov, Belgorod Shukhov State Technological University
Applications of a number notation hyperformat for sicence and engineering
R. Kakarala, Nanyang Technologcal University
Triple correlation on groups
B. Gyöngyi, Kaposvar University
About the method of component-based object comparison for objectivity
I. Gabor, Eotvos Lorand University
Revealing the density-based clustering structure of the Swiss-prot database

Section 19: Mathematics Education and Popularization of Mathematics

M. Del Pilar Canales Chacón,, Universidad Austral De Chile
Mathematics by and for the 21st century: goals and strategies
M. P. U. Roczen, Humboldt-Universität zu Berlin
Online presentation of linear algebra
M. D. Sánchez, Instituto Fray Luis De Granada
The Lilavati's legend

Poster Session 2

Saturday, August 21, 2010

18:00-20:00   Hall 2

Section 2: Algebra

H. Lee, Chonnam National University
Minimum rank of line graphs of some graphs
M. T. Sotiropoulos, University School for Pedagogical and Technological Education (ASPETE)
Mathematical theory of concepts: lattices of (sub)classes, distance
A. Ahanjideh, University of Shahrekord
A characterization of $C_n(q)$ by the set of orders of maximal abelian subgroups
P. Das, Gauhati University
Wreath sum of near rings revisited
K. S.Zeenath/M. George, Mar Ivanios College
Application of finite field in coding theory
Y. Satyendra Singh, Jamia Millia Islamia
Some characterization of regular groupoid lattices
A. Guterman, Moscow State University - M. V. Lomonosov
Frobenius endomorphisms of matrix spaces
A. Tonks, London Metropolitan University
Homotopy Batalin-Vilkovisky algebras
V. Joshi, Pune University
On prime ideal principle in lattices
A. Muthkur, Periyar University
An elementary solution to classical problems in number theory and algebra
S. Tikhonov, National Academy of Sciences of Belarus
Central simple algebras after a scalar extension
M. Vukovic
About Krasner's and Vukovic's paragraduations
R. K. Mishra, Motilal Nehru National Institute of Technology, Allahabad
Lifting of generators of an ideal over Laurent polynomial ring
O. A. S. Karamzadeh, Chamran University
On Artinian modules over Duo rings
B. H. Im, Chonnam National University
Approximate symmetry in certain quasigroups derived from the dihedral group
B. Moslemi, Petroleum University of Technology
On G-domains
S. Kaptanoglu, Middle East Technical University
p-Power points and modules of constant p-power Jordan type
P. P. Pach, ELTE, Hungary
On the distance of a polynomial near-ring code
G. Pluhár, ELTE, Hungary
Combinatorics of words over semigroups
N. Zamani, University of Mohaghegh Ardabili
Some characterization results in multiplication modules
A. Madanshekaf, Semnan University
First order infinitesimals in the category of smooth functors

Section 3: Number Theory

V. Chandrasekhar, Sacred Heart College, Tirupattur
Generalized difference operator of the n-th kind and its applications in number theory (Part 1)
S. Stamatopoulos, Pedagogikal Institute
Proof of Fermat's Last Theorem
M. Agarwal, University of Michigan - Dearborn
Bloch-Kato conjecture for convolution L-functions

Section 4: Algebraic and Complex Geometry

A. G. Aleksandrov, Russian Academy of Sciences
Residues of logarithmic differential forms

Section 5: Geometry

R. Villacampa Gutierrez, University of Zaragoza
Balanced metrics by means of evolution equations
J. A. Aledo, University of Castilla-La Mancha
On the existence of affine maximal maps
E. Pak, Kyungpook National University
Existence of proper contact CR-product and mixed foliate contact CR submanifolds
M. Matveev, Moscow Institute of Physics and Technology
A theory of face polytopes
V. Rovenski, University of Haifa
Extrinsic geometric flows on foliated manifolds

Section 6: Topology

S. Maloni, University of Warwick
Top terms of polynomial traces in Kra's plumbing construction
Y. Zelenyuk, University of The Witwatersrand
Ideals in Stone-Cech compactifications
L. Armas Sanabria, Universidad Autonoma Metropolitana
Artin presentations and fundamental groups
M. Namdari, Shahid Chamran University
a-Scattered spaces
S. Afrooz, Khoramshahr Marine Sciences and Technology University
$C_\infty(X)$ and related ideals
A. R. Aliabad, Shahid Chamran University
On the group of torsion elements of $C(X)$

Section 7: Lie Theory and Generalizations

E. M. Cañete. Universidad De Huelva
Maximum length of nilpotent Leibniz algebras
L. M. Camacho, Universidad De Sevilla
Naturally graded p-filiform Leibniz algebras
G. M. Jose Ramón, Universidad De Sevilla
On evolution algebras
J. Jung, Seoul National University
Highest weight modules over quantum queer Lie superalgebra $U_q((q(n))$

Section 8: Analysis

D. Lakshmi Narayana Swamy, University of Mysore
A note on convex combinations
S. Bhatt, H. N. B. Garhwal University
Fixed point theorems for certain contractive mappings in cone metric spaces
M. Joshi, University of Amravati
Characterization of totally bounded subsets of locally compact group G through almost periodic like families
S. D. Purohit, College of Technology and Engineering, Udaipur
A note on certain classes of transformations
P. Agrawal, IIT, Roorkee
L_p-inverse theorem for iterates of Bernstein-Durrmeyer type polynomials
Devendra Kumar, M. M. H. College
Prolate spheroidal wavelet coefficients, frames and double infinite matrices
P. Sahoo, IIT, Kanpur
On a class of harmonic univalent functions defined by a linear operator
R. Malekar, National Defence Academy
Discrete Fourier transform and Jacobi theta function identities
V. R. Lakshmi Gorty, NMIMS University
A Parseval equation and the distributional finite generalized Hankel-Clifford transformation
B. Rubin, Louisiana State University
Radon transforms on the Heisenberg group and transversal Radon transforms
K. K. Singh, IIT, Roorkee
Higher order approximation by iterates of modified beta operators
N. Lal, University of California, Riverside
Spectral analysis on self-similar sets and spectral zeta function of fractals
G. Chen, Donghua University
What does the uncertainty of elements mean
S. Selivanova, Sobolev Institute of Mathematics
On some metrical and algebraic questions for general nonholonomic spaces
R. Jain, M. V. P. G. College
A study of functions associated with mock theta functions

Section 9: Functional Analysis and Applications

N. R. Mangalambal, St. Joseph's College, Irinjalakuda
Abelian and Tauberian theorems for the Laplace transformations on duals of ordered topological vector spaces
S. R. Bokka, Osmania University
On n-normed linear space valued strongly ∇_r-Cesàro and strongly ∇_r-lacunary summable sequences
M-T. Chien, Soochow University
Lucas' theorem and numerical range
I. Park, Korea University
Composition operators on holomorphic Sobolev spaces in B_n
F. J. Fernandez-Polo, Universidad De Granada
Weak compactness in the dual space of a ${}_JB^*$-triple is commutatively determined

Section 12: Mathematical Physics

G. Nath, NIT, Raipur
Self-similar flow of a rotating dusty gas behind the shock wave with increasing energy, conduction and radiation heat flux
U. Debnath, Bengal Engineering and Science University
Validity of thermodynamical laws in dark energy filled universe

G. Jit Singh, SCD Government College, Ludhiana
Thermal convection of Walters b'dusty compressible viscoelastic fluid porous medium with Hall currents

S. Chattopadhyay, Pailan College of Management and Technology
Correspondence between Ricci and other dark energies

T. Sivakumar, Bharathiar University
Convective instability in a vibrating porous layer using a thermal non-equilibrium model

R. P. K. Malmini, University of Sri Jayawardenepura
A simulation based model for price prediction

S. Siddabasappa, Government Science College, Bangalore
Exact solution of special classes of flows in rotating fluids

C. E. Parmeggiani, Mathesis Milano
Quantum inferometry, Euler angles, unitary representations of $SU(2)$

S. Agarwala, California Institute of Technology
The β-function over curved space-time under ζ-function regularization

B. Sen, Indian School of Mines
A note on the disturbance of SH-type of waves due to the shearing stress discontinuity in a visco-elastic layered half space

S. K. Das, Gauhati University
Exponentially accelerated vertical plate with mass diffusion and variable plate temperature

C. Campbell
Bethe ansatz solution of an integrable non-abelian anyon chain with $D(D_3)$ symmetry

D. Mandal, Indian School of Mines
On the propagation of SH-type waves in elastic isotropic and homogeneous media sandwiched by elastic inhomogeneous medium

H. Kajimoto, Nagasaki University
On several fifth virial coefficients for the hard core potential

A. Komech, Vienna University and IITP, RAS
On global attractors of nonlinear hyperbolic PDEs

C. A. Gomez Sierra, Universidad Nacional De Columbia
On intergability of Riccati equation and its relation with some computational methods used to find exact solutions to NLPDEs

D. Bykov, Trinity College Dublin and Steklov Mathematical Institute
Integrability properties of the $AdS_4 \times CP^3$ string sigma model

M. Sanmartino, UNLP, Argentina
An alternative well-posedness property and static space-times with naked singularities

S. N. Pandey, Motilal Nehru National Institute of Technology
Symmetry and integrability aspects of generalised damped nonlinear oscillators and systems

Section 15: Mathematical Aspects of Computer Science

R. Sawae, Okayama University of Science
Quantum computations in the bulk ensemble NMR quantum computer

H. Yu, POSTECH, Korea
Classification of some distance-regular graphs

E. Csoka, Eotvos Lorand University
Maximum flow is approximable by deterministic constant-time algorithm in sparse networks

B. Sharma, University of the South Pacific
Tunnel passing manoevres of a team of car-like robots in formation

Section 16: Numerical Analysis and Scientific Computing

N. R. Nandakumar, Delaware State University
Conjugate gradient methods for nonsymmetric systems
T. Hymavathi, Adikavi Nannaya University
Numerical study of visco-elastic fluid flow over an exponentially stretching sheet
M. Mitra, University of Hyderabad
First step into pattern-finding DNA kernel
Y. Quintana, Universidad Simon Bolivar
Some Markov-Bernstein type inequalities and certain class of Sobolev polynomials