CHAPTER 27

MATHEMATICAL SCIENCES
MATHEMATICS

Doctoral Theses

374. IFFAT JAHAN
Fuzzy Subgroups and *L*-Group Theory
Supervisor : Dr. Naseem Ajmal
Th 21122

Contents

1. Introduction 2. Preliminaries 3. Normalizer of *l*-subgroups 4. The lattice of normal l-subgroups 5. Characteristic *l*-subgroups and normality 6. Nilpotency of *l*-subgroups 7. Solvability of *l*-subgroups 8. Normal closure of *l*-subgroups. References.

375. JAIN (Naveen Kumar)
Radius Constants for Geometric Properties of Univalent Functions.
Supervisors : Prof. B.K.Dass and Dr. V. Ravichandran
Th 21126

Contents

1. Introduction 2. On the radius constants for classes of analytic functions 3. Radii of starlikeness associated with the lemniscate of Bernoulli and the left-half plane 4. Radius problems for convex combination of analytic functions with identity function 5. Convolutions of certain analytic functions 6. Radii of starlikeness and convexity for functions. References.

376. JAIN (Sandhya)
Weighted Function Spaces of Lebesgue Type
Supervisors : Prof. Ajay Kumar and Dr. Pankaj Jain
Th 21313

Contents

1. Introduction. 2. On young type inequalities for generalized convolution. 3. Spaces of bochner integrable functions. 4. Multidimensional lorentz spaces. 5. O'Neil convolution inequalities in lorentz spaces. 6. On anisotropic weighted sobolev inequalities. Notations and references.

377. NAGPAL (Sumit)
Close-To-Convex Planar Harmonic Univalent Mappings.
Supervisors : Prof. Ajay Kumar and Dr. V. Ravichandran
Th 21124

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1. Introduction 2. Radii problems for harmonic mappings. 3. A subclass of close-to-convex harmonic mappings. 4. Construction of nnivalent harmonic mappings. 5. Two comprehensive. Families of harmonic mappings. References.

378. PORWAL (Deepak Kumar)
On Weighted Slant Hankel Operators
Supervisors : Prof. Gopal Dutt
Th 21125

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1. Introduction 2. Weighted hankel operators on $H^2(\beta)$ 3. Weighted Hankel Operators on $L^2(\beta)$ 4. Weighted slant hankel operators 5. Compressions of weighted slant hankel operators. 6. Unanswered problems. References.

379. VANDANA
Projective Norms on Tensor Products of Operator Spaces.
Supervisors : Prof. Ajay Kumar
Th 21123

Contents

1. Background and preliminary. 2. Symmetry and Quasi-Centrality of $A \otimes B$. 3. The bidual of projective tensor product of C*-algebras and inner automorphisms. 4. Regularity and property (F) of $A \otimes B$. 5. Schur tensor product of operator spaces. Bibliography.

M.Phil Dissertations

380. ABHAY KUMAR
Some Fuzzy Matrix Games.
Supervisor : Dr. Ratnesh Saxena

381. AGGARWAL (Rachna)
Nonlinear Extensions of Fredholm Theory.
Supervisor : Dr. R. Panda

382. BAJARGAAN (Ruchi)
Study of Shock Waves Under Gravitation and Radiation Field.
Supervisor : Dr. Arvind Patel

383. CHHATRA PAL
Finite Difference Methods for Transport Equations.
Supervisor : Dr. Swarn Singh

384. GANDHI (Shweta)
Uniquely Clean Rings.
Supervisor : Dr. Kanchan Joshi

385. GUPTA (Naveen)
Injectivity in Higher Order Complex Domains.
Supervisor : Dr. Sanjay Pant

386. JINDAL (Saloni)
Study of Various Types of Chaos Synchronization With Different Hyperchaotic Systems.
Supervisor : Dr. Kanchan Joshi

387. LALWANI (Kushal)
Triangulation and Classification of 2 Manifolds.
Supervisor : Dr. Sanjay Kumar

388. MONGIA (Neha)
Reducibility and Triangularizability of Operators.
Supervisor : Dr. Alka Marwah

389. NAMITA
Perfectness of Codes in Generalized Hamming Spaces.
Supervisor : Dr. B. K. Dass

390. PRAJAPATI (Tarachand)
Degree Theory in Analysis and Applications.
Supervisor : Dr. R. Panda

391. SAXENA (Prakriti)
Surjectivity of Homomorphisms on Fundamental Groups Induced by Quotient Maps.
Supervisor : Dr. S. P. Tripathi

392. SINGH (Himanshi)
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Supervisor : Dr. Manjari Srivastava

393. VERMA (Poonam)
Portfolio Optimization with Various Risk Measures and Structured Products.
Supervisor : Dr. Ratnesh Saxena

394. VERMA (Shelly)
Bicomplex Function Theory and Complex Harmonic Morphisms Into Bicomplex Manifolds.
Supervisor : Prof. Ajay Kumar