

Statistics and Mathematics Unit  
Indian Statistical Institute  
Bangalore Centre

**List of publications of the Unit during April 2010-March 2018**

**2010-2011**

**Papers published in journals :**

- 1) Adhikari, S.D., Ambily, A.A. and Sury, B.: Zero-sum problems with subgroup weights, *Proc. Indian. Acad. Sci.*, **120**, 259-266, 2010.
- 2) Athreya, Siva R. and Swart, Jan M.: Survival of contact processes on the hierarchical group, *Probab. Theory Related Fields*, **147(3-4)**, 529-563, 2010.
- 3) Athreya, Krishna, Athreya, Siva R. and Iyer, Srikanth: Critical Age Dependent Branching Markov Processes and Their Scaling Limit, *Proceedings of the Indian Academy of Sciences*, **120(3)**, 363-385, 2010.
- 4) Bagchi, Sunanda: Main-effect plans orthogonal through the block factor. *Technometrics*, **52(2)**, 243-249, 2010.
- 5) Bhat, B.V. Rajarama, Liebscher, Volkmar, Mukherjee, Mithun and Skeide, Michael: The spatial product of Arveson systems is intrinsic, *J. Funct. Anal.* **260(2)**, 566-573, 2011.
- 6) Bhat, B.V. Rajarama and Mukherjee, Mithun: Inclusion systems and amalgamated products of product systems, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, **13(1)**, 1-26, 2010.
- 7) Bhat, B.V. Rajarama, Liebscher, Volkmar and Skeide, Michael: Subsystems of Fock need not be Fock: spatial CP-semigroups, *Proc. Amer. Math. Soc.*, **138(7)**, 2443-2456, 2010.
- 8) Biswas, Jishnu and Ravindra, G.V.: Arithmetically Cohen-Macaulay bundles on complete intersection varieties of sufficiently high multidegree, *Math. Zeitschrift*, **265(3)**, 493-509, 2010.
- 9) De Bruyn, B., Sahoo, B.K. and Sastry, N.S.N.: Non-abelian representations of the slim dense near hexagons on 81 and 243 points, *J. Algebraic Combin.*, **33(1)**, 127-140, 2011.
- 10) Ghosh, J.K. and Delampady, M.: Bayesian P-values, in *International Encyclopedia of Statistical Science*. M. Lovric (Ed.), **1**, 101-104, Springer, 2011.
- 11) Karanth, K.U., Gopalaswamy, A.M., Samba Kumar, N., Delampady, M., Nichols, J.D., Seidensticker, J., Noon, B.R. and Pimm, S.L.: Counting India's wild tigers reliably, *Science*, **332**, 791, 2011.
- 12) Raja, C.R.E.: On the existence of ergodic automorphisms in  $Z_d$ -actions on compact groups, *Ergodic Theory Dynam. Systems*, **30(6)**, 1803-1816, 2010.
- 13) Raja, C.R.E. and Shah, Riddhi: Distal actions and shifted convolution property, *Israel J. Math.*, **177**, 391-412, 2010.
- 14) Sreekantan, Ramesh:  $K_1$  of products of Drinfeld modular curves and special values of L-functions, *Compos. Math.*, **146(4)**, 886-918, 2010.

- 15) Sreekantan, Ramesh: Non-Archimedean regulator maps and special values of L-functions. Cycles, motives and Shimura varieties, *Tata Inst. Fund. Res. Stud. Math.*, 469-492, 2010.
- 16) Sury, B.: Tits building and an application to central extensions of p-adic algebraic groups by finite p-groups, *Proc. Amer. Math. Soc.*, **139(6)**, 2033-2044, 2011.
- 17) Sury, B.: A generalisation of a converse to Schur's theorem, *Arch. Math.*, **95(4)**, 317-318, 2010.
- 18) Sury, B.: Nothing lucky about 13, *Mathematics Magazine*, **83(4)**, 289-293, 2010.
- 19) Sury, B.: Trigonometric expressions for Fibonacci and Lucas numbers, *Acta Math. Univ. Comeniana*, **LXXIX(2)**, 199-208, 2010.
- 20) Sury, B.: Group theory lends a hand to number theory, *The Mathematical Gazette*, Article **94.13**, 14-16, 2010.
- 21) Sury, B.: Extending digits to obtain perfect powers and primes, *Resonance*, **15(11)**, 2010.

## 2011-12

### Papers published in journals :

1. Amdeberhan, Tewodros, Angelis, Valerio De, Lin, Minghua, Moll, Victor H. and Sury, B.: A pretty binomial identity. *Elemente der Mathematik*, **67**, 18-25, 2012.
2. Athreya, Siva R., Sun, Rongfeng,: One dimensional voter model interface revisited. *Electronic Communications in Probability*, **16**, 792-800, 2011.
3. Athreya, Siva R., Sethuraman, Sunder and Toth, Balint: On the Range, local times and periodicity of random walk on an interval. *Latin American Journal of Probability and Mathematical Statistics*, **VIII**, 269-284, 2011.
4. Athreya, S.R. and Swart, Jan, Systems of branching, annihilating, and coalescing particles" *Electronic Journal of Probability*, **17**, 1-32, 2012.
5. Bagchi, Bhaskar, Datta, Basudeb: From the icosahedron to natural triangulations of  $\mathbf{CP}^2$  and  $S^2 \times S^2$ . *Discrete Comput. Geom.*, **46(3)** (2011), 542-560, 2011.
6. Bagchi, Bhaskar; Datta, Basudeb: On Walkup's class  $K(d)$  and a minimal triangulation of  $(S^3 \times S^1)^{\#3}$ . *Discrete Math.*, **311(12)**, 989-995, 2011.
7. Belbachir, Hacene, Rahmani, Mourad and Sury, B.: Alternating Sums of the reciprocals of binomial coefficients. *Journal of Integer Sequences*, **15**, 2012.
8. Belbachir, Hacene, Rahmani, Mourad and Sury, B.: Sums involving moments of reciprocals of binomial coefficients. *Journal of Integer Seq.*, **14**, 2011.
9. Bharali, Gautam, Gorai, Sushil: Uniform algebras generated by holomorphic and close-to-harmonic functions. *Proc. Amer. Math. Soc.* **139(6)**, 2183-2189, 2011.
10. Bhat, B. V. Rajarama: Linear maps respecting unitary conjugation. *Banach J. Math. Anal.*, **5(2)**, 1-5, 2011.
11. Bhat, B. V. Rajarama, Roots of states: *Communications on Stochastic Analysis*, Vol. 6, No. 1 (2012) 85-93.

12. Douglas, Ronald G., Misra, Gadadhar and Sarkar, Jaydeb: Contractive Hilbert modules and their dilations. *Israel Journal of Mathematics*, **187(1)**, 141-165, 2012.
13. Douglas, Ronald G., Foias, Ciprian and Sarkar, Jaydeb: Resolutions of Hilbert Modules and Similarity. *Journal of Geometric Analysis*, **22(2)**, 471-490, 2012.
14. Gopalaswamy, A.M., Royle, J.A., Delampady, M., Nichols, J.D., Karanth, K.U. and MacDonald, D.W.: Density estimation in tiger populations: combining information for strong inference, *Ecology*, **93**, 1741–1751, 2012.
15. Gorai, Sushil: Local polynomial convexity of the union of two totally-real surfaces at their intersection. *Manuscripta Math.* **135(1-2)**, 43–62, 2011.
16. Kulkarni, Manisha and Sury, B.: On Diophantine equations of the form  $(x-a_1)(x-a_2)\dots(x-a_k) + r = y^n$ . *Proc. Indian Acad. Sci.*, **121(3)**, 245-247, 2011.
17. Mason, Alec W. and Sury, B.: Subgroups of algebraic groups which are clopen in the S-congruence topology. *Journal of Group Theory*, **15**, 47-55, 2012.
18. Padmawar, V. R.: Hartley-Ross Estimator Revisited, *Journal of Indian Statistical Association* **49**, No. 2, 199-213, 2011.
19. Ramasubramanian, S.: Multidimensional insurance model with risk-reducing treaty. *Stochastic Models*, **27(3)**, 363-387, 2011.
20. Ramasubramanian, S.: A multidimensional ruin problem. *Communications on Stochastic Analysis*, **6(1)**, 33-47, 2012.
21. Sankaran, Parameswaran, Thakur, Ajay Singh: Complex structures on products of circle bundles over complex manifolds. *C. R. Math. Acad. Sci. Paris*, **349(7-8)**, 437–439, 2011.
22. Sastry, N. S. Narasimha, Shukla, R. P.: Multiplicities of simple modules in the  $Sp(4, q)$ -permutation module on  $P(3, q)$ ,  $q$  even. *Arch. Math. (Basel)*, **97(3)**, 237–245, 2011.
23. Smolensky, A.V., Sury, B. and Vavilov, N.A.: Gauss decomposition for Chevalley groups - Revisited, *International Journal of Group Theory*, **1(1)**, 3-16, 2012.
24. Smolensky, A.V., Sury, B. and Vavilov, N.A.: Unitriangular factorizations of Chevalley groups, *J. Math. Sci. (N.Y.)*, **183(5)** (2012), 584-599.
25. Sury, B.: Uncountably generated ideals of functions. *College Mathematics Journal*, **42:5**, 404-406, 2011.
26. Sury, B.: Riemann Hypothesis - the Prime Problem, *Mathematics Newsletter of the Ramanujan Mathematical Society*, September, 48-62, 2011.
27. Sury, B.: Weierstrass's theorem - leaving no Stone unturned. *Resonance*, **16(4)**, 341-355, 2011.
28. Sury, B.: Group theory and tiling problems, *Symmetry: A multi-disciplinary Perspective*, *RMS Lecture Notes Series*, **16**, 97-117, 2012.
29. Sury, B.: Group theory - what's beyond?, *Math Unlimited, Essays in Mathematics*. *Science Publishers*, 3-22, 2012.
30. Sury, B.: A walk which must be rational for the same reason that 1 is not congruent. *Resonance*, **17(1)**, 1-7, 2012.

31. Sury, B.: Covering the integers. *Resonance*, **17(3)**, 76-82, 2012.
32. Sury, B.: Groups - beyond the undergraduate syllabi, 'Mth Unlimited - Essays in Mathematics', Science Publishers, CRC Press, 2012, 3-22.
33. Sury, B.: Riemann Hypothesis - The Prime Problem, *Mathematics Newsletter*, Ramanujan Mathematical Society, **21**, 12-26, 2011.
34. Sury, B. and Thangadurai, R.: S.Chowla & S.S.Pillai, *Resonance*, Vol. 17, September 2012.

**Papers published in conference proceedings:**

1. Bagchi, Bhaskar: On Characterizing Designs by their Codes, Proceedings of a Satellite Conference, ICM 2010, Buildings, Finite geometries and Groups, N.S. Narasimha Sastry (Editor), *Springer Proceedings in Mathematics*, 10, 1-14, 2011.
2. Guivarc'h, Y. and Raja, C. R. E. : Polynomial Growth, Recurrence and Ergodicity for Random Walks on Locally Compact Groups and Homogeneous Spaces. *Progress in Probability*, **64**, 65-74, 2011.
3. Sastry, N.S.N.: Some Equations over Finite Fields Related to Simple Groups of Suzuki and Ree Types. Proceedings of a Satellite Conference, ICM 2010, Buildings, Finite geometries and Groups, N.S. Narasimha Sastry (Editor), *Springer Proceedings in Mathematics*, **10**, 251-271, 2011.

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List of publications of the Unit during April 2012 - March 2018

2012-2013

**Papers published in journals**

1. Athreya, Siva; Eckhoff, Michael and Winter, Anita,. Brownian motion on **R**-trees. *Trans. Amer. Math. Soc.*, **365**, 3115-3150, 2013.
2. Bagchi, Bhaskar, Datta, Basudeb,: A triangulation of  $CP^3$  as symmetric cube of  $S^2$ . *Discrete Comput. Geom.*, **48(2)**, 310-329, 2012.
3. Bhat, B. V. Rajarama; Ramesh, G.; Sumesh, K. Stinespring's theorem for maps on Hilbert  $C^*$ -modules. *J. Operator Theory*, **68(1)**, 173–178, 2012.
4. Delampady, M.: Minimum description length methods in Bayesian model selection: some applications, *Open Journal of Statistics*, **3**, 103-117, 2013.
5. Dey, S. and Delampady, M.: False discovery rates and multiple testing, *Resonance*. **18(12)**, 1095-1109, 2013.
6. Foias, Ciprian, Sarkar, Jaydeb,: Contractions with polynomial characteristic functions I. Geometric approach. *Transaction of American Math. Society*, **364(8)**, 4127-4153, 2012.
7. Douglas, Ronald G.; Kim, Yun-Su; Kwon, Hyun-Kyoung and Sarkar, Jaydeb, Curvature invariant and generalized canonical operator models – I, *Operator Theory Advances and Applications*, **221**, 293-304, 2012.
8. Guivarc'h, Y. and Raja, C. R. E. Recurrence and ergodicity of random walks on linear groups and on homogeneous spaces. *Ergodic Theory Dynam. Systems*, **32(4)**, (2012), 1313-1349.
9. Kella, Offer and Ramasubramanian, S., Asymptotic Irrelevance of Initial Conditions for Skorokhod Reflection Mapping on the Nonnegative Orthant, *Mathematics of Operations Research*, **37**, 301- 312, 2012.
10. Korbaš, Július; Naolekar, Aniruddha C.; Thakur, Ajay Singh: Characteristic rank of vector bundles over Stiefel manifolds, *Arch. Math. (Basel)*, **99(6)**, 577-581, 2012.
11. Naolekar, Aniruddha C.: Realizing cohomology classes as Euler classes, *Math. Slovaca*, **62(5)**, 949 - 966, 2012.
12. Padmawar, V.R, Eliciting information on sensitive matters without inviting respondents' Ire: Randomized Response Techniques, *Resonance*, **17(4)**, 330-346, 2012.
13. Pati, V.: Quaternions and Rotations in 3-Space, *Mathematics Newsletter*, Ramanujan Mathematical Society, **23(4)**, 257-263, 2013.
14. Raja, C. R. E., A stochastic difference equation with stationary noise on groups, *Canadian Journal of Mathematic*, **64**, 1075-1089, 2012.

15. Rao, T. S. S. R. K., On ideals and generalized centers of finite sets in Banach spaces, *Journal of Mathematical Analysis and Applications*, **398**, 886-888, 2013.
16. Ramasubramanian, S., A symbiotic insurance network with interacting claim arrivals and risk diversifying treaty, *Bulletin of Kerala Mathematics Association*, **9**, 1-16, 2012.
17. Rao, T. S. S. R. K., Central and almost constrained subspaces of Banach spaces, *Operators and Matrices*, **6**, 371-383, 2012.
18. Rao, T. S. S. R. K., The one and half ball property in spaces of vectorvalued functions, *J. Convex. Anal.* **20**, 13-23, 2013.
19. Rao, T. S. S. R. K., Intersection properties of balls and projections of norm one, *Mathematics Newsletter*, **22**, 203-208, 2012.
20. Rao, T. S. S. R. K., Length inequalities for vectors in normed linear spaces, *The Mathematics Student*. **81**, 1-12, 2012.

## 2013-14

### Papers published in journals

1. Athreya, K.B. and Rajeev, B.: Brownian Crossings via Regeneration times, *Sankhya*, **75**, Series A, Part 2, 194-210, 2013.
2. Bagchi, Bhaskar and Datta, Basudeb: Higher-dimensional analogues of the map coloring problem, *Amer. Math. Monthly*, **120(8)**, 733-737, 2013.
3. Bagchi, Bhaskar and Datta, Basudeb: On  $k$ -stellated and  $k$ -stacked spheres, *Discrete Math.*, **313(20)**, 2318-2329, 2013.
4. Bagchi, Bhaskar and Datta, Basudeb: On polytopal upper bound spheres, *Mathematika*, **59(2)**, 493-496, 2013.
5. Bagchi, B. and Sastry, N.S.N.: Ovoidal packing in  $PG(3,q)$ ,  $q$  even, *Discrete Mathematics*, **313**, 2213-2217, 2013.
6. Bagchi, Bhaskar and Datta, Basudeb: On stellated spheres and a tightness criterion for combinatorial manifolds, *European J. Combin.*, **36**, 294-313, 2014.
7. Bary-Soroker, Lior and Kumar, Manish: Subgroup Structure of Fundamental Groups in Positive Characteristic, *Comm. Algebra*, **41(10)**, 3705-3719, 2013.
8. Bhat, B. V. Rajarama and Sumesh, K.: Bures distance for completely positive maps, *Infin. Dimens. Anal. Quantum Probab. Relat. Top.*, **16(4)**, 22 pages, 2013.
9. Fialowski, Alice; Mukherjee, Goutam and Naolekar, Anita: Versal deformation theory of algebras over a quadratic operad by Homology, *Homotopy and applications*, **16(1)**, 179 – 198, 2014.
10. Gorai, Sushil: On the polynomial convexity of the union of three totally-real planes in  $C^2$ , *Int. Math. Res. Not. IMRN.*, **2013(21)**, 4985-5001, 2013.
11. Douglas, Ronald G.; Kim, Yun-Su; Kwon, Hyun-Kyoung and Sarkar, Jaydeb: Curvature invariant and generalized canonical operator models – II, *J. Funct. Anal.*, **266(4)**, 2486-2502, 2014.

12. Jayanarayanan, C. R.: Intersection properties of balls in Banach spaces, *J. Funct. Spaces Appl.*, 9 pp, 2013.
13. Kumar, Manish; On the compositum of wildly ramified extensions, *J. Pure Appl. Algebra*, **218(8)**, 1528-1536, 2014.
14. Kumar, Manish: Killing wild ramification, *Israel Journal of Mathematics*, **xxx**, 1-11, 2014.
15. Kumar, Manish: The fundamental group of affine curves in positive characteristic, *J. Algebra*, **399**, 323-342, 2014.
16. Naolekar, A. C. and Thakur, A. S.: Vector bundles over iterated suspensions of stunted real projective spaces, *Acta Math. Hungar.*, **142(2)**, 339-347, 2014.
17. Prajapati, S.K. and Sury, B.: On the total character of finite groups, *International Journal of Group Theory*, **3(1)**, 47-67, 2014.
18. Raja, C. R. E., Strong relative property ( $T$ ) and spectral gap of random walks, *Geometriae Dedicata*, **164**, 9-25, 2013.
19. Rajeev, B.: Translation Invariant diffusions in the space of tempered distributions, *Indian Journal of Pure and Applied Mathematics*, **44(2)**, 231, 2013.
20. Ramasubramanian, S.: A discussion on "Problems of ruin and survival in economics: applications of limit theorems in probability" by R. Bhattacharya et al. *Sankhya B* **75(2)**, 184-189, 2013.
21. Rao, T. S. S. R. K.; On a Garkavi Type Theorem for  $M$ -Ideals of Finite Codimension, *Numer. Funct. Anal. Optim.*, **34(9)**, 1041-1049, 2013.
22. Rao, T. S. S. R.K.: On intersections of ranges of projections of norm one in Banach spaces, *Proc. Amer. Math. Soc.*, **141(10)**, 3579-3586, 2013.
23. Rao, T. S. S. R.K.: The one and half ball property in spaces of vector-valued functions, *J. Convex Anal.*, **20(1)**, 13-23, 2013.
24. Ravindra, G. V. and Tripathi, Amit: Extensions of vector bundles with application to Noether-Lefschetz theorems, *Commun. Contemp. Math.*, **15(5)**, 20 pp, 2013.
25. Sarkar, Jaydeb; Sasane, Amol and Wick, Brett D.: Doubly commuting submodules of the Hardy module over polydiscs, *Studia Math.*, **217(2)**, 179-192, 2013.
26. Sarkar, Jaydeb: Wold decomposition for doubly commuting isometries, *Linear Algebra Appl.*, **445**, 289-301, 2014.
27. Skeide, Michael and Sumesh, K.: CP-H-extendable maps between Hilbert modules and CPH-semigroups, *J. Math. Anal. Appl.*, **414(2)**, 886-913, 2014.
28. Sury, B.: Composition of polynomials, *The Mathematical Gazette*, **97**, 2013, 36-42.
29. Sury, B.: Macaulay expansion, *The American Mathematical Monthly*, **121**, 359-360, 2014.
30. Sury, B.: An equation involving Euler's phi, *The Mathematical Gazette*, Article 93.08, 2014.
31. Sury, B.: Chord lengths, Discriminants of cyclotomic fields, and reducibility of cyclomic polynomials modulo primes, *Mathematics Newsletter*, Ramanujan Mathematical Society, **24**, 94-97, 2014.

32. Sury, B.: Ramanujan's awesome sums, *Mathematics Newsletter*, Ramanujan Mathematical Society, **24**, 31-37, 2013.

### Papers published in Conference Proceedings

1. Sastry, N.S.N.: Codes and Geometry of some classical generalized polygons, *Workshop and Conference on Groups and Geometries*, Springer Proceedings in Mathematics and Statistics, **82**, 259-278, 2014.

## 2014-15

### Papers published in journals

1. Athreya, Siva; Bandyopadhyay, Antar and Dasgupta, Amites: Random walks in I.I.D. random environment on Cayley trees, *Statistics & Probability Letters*, **92**, 39-44, 2014.
2. Bagchi, Bhaskar: A tightness criterion for homology manifolds with or without boundary, *European J. Combin.*, **46**, 10–15, 2015.
3. Bagchi, Bhaskar and Datta, Basudeb: Corrigendum to Combinatorial triangulations of homology spheres, *Discrete Math.*, **338 (4)**, 569–570, 2015.
4. Bagchi, Bhaskar; Panigrahi, Pratima and Sahoo, Uma Kant: On the strongly regular unit distance graphs. *J. Combin. Math. Combin. Comput.* **89**, 293–302, 2014.
5. Bhar, Suprio and Rajeev, B.: Differential operators on Hermite Sobolev spaces, *Proceedings of the Indian Academy of Sciences – Mathematical Sciences*, **125 (1)**, 113-125, 2015.
6. Bhat, B. V. Rajarama and Mallick, Nirupama : Nilpotent completely positive maps, *Positivity* **18**(2014), 567–577. MR 3249920.
7. Bhat, B. V. Rajarama and Ravichandran, Mohan : The Schur-Horn theorem for operators with finite spectrum, *Proc. Amer. Math. Soc.* **142** (2014), no. 10, 3441-3453. MR 3238420.
8. Chattopadhyay, A., Das, B.K. and Sarkar, Jaydeb: Tensor product of quotient Hilbert modules, *Journal of Mathematical Analysis and Applications*, **424**, 727-747, 2015.
9. Chattopadhyay, A., Das, B.K. and Sarkar, Jaydeb: Star-Generating Vectors of Rudin's Quotient Modules, *Journal of Functional Analysis*, **267**, 4341-4360, 2014.
10. Chattopadhyay, A., Das, B.K., Sarkar, Jaydeb and Sarkar, Santanu: Wandering subspaces of the Bergman space and the Dirichlet space over polydisc, *Integral Equations Operator Theory*, **79**, 567-577, 2014.
11. Das, B.K.; Sarkar, Jaydeb and Sarkar, Santanu: Maximal contractive tuples, *Complex Analysis and Operator Theory*, **8**, 1325-1339, 2014.
12. Das, B.K. and Sarkar, Jaydeb: Rudin's Submodules of  $H^2(\mathbf{D}^2)$ , *C. R. Acad. Sci. Paris*, **353** 51-55, 2015.
13. Gopaldaswamy, A.M., Delampady, M., Karanth, K.U., Samba Kumar, N. and MacDonald, D.W.: An examination of index-calibration experiments: counting tigers at macroecological scales, *Methods in Ecology and Evolution*, (2015).
14. Gorai, Sushil: A note on polynomial convexity of the union of finitely many totally-real planes in  $C^2$ , *J. Math. Anal. Appl.*, **418 (2)**, 842–851, 2014.



15. Keshari, Dinesh Kumar: Trace formulae for curvature of jet bundles over planar domains, *Complex Anal. Oper. Theory*, **8 (8)**, 1723–1740, 2014.
16. Ji, Kui; Jiang, Chunlan; Keshari, Dinesh Kumar and Misra, Gadadhar: Flag structure for operators in the Cowen-Douglas class, *C. R. Math. Acad. Sci. Paris*, **352 (6)**, 511–514, 2014.
17. Naolekar, Aniruddha C. and Thakur, Ajay Singh: Vector bundles over iterated suspensions of stunted real projective spaces, *Acta Math. Hungar.*, **142 (2)**, 339-347, 2014.
18. Naolekar, Aniruddha C. and Thakur, Ajay Singh: Note on the characteristic rank of vector bundles, *Math. Slovaca*, **64 (6)**, 1521-1540, 2014.
19. Naolekar, Aniruddha C. and Thakur, Ajay Singh: On trivialities of Chern classes, *Acta Math. Hungar.*, **144 (1)**, 90-109, 2014.
20. Prajapati, S.K. and Sury, B.: On the total character of finite groups, *International Journal of Group Theory*, **3**, 47-67, 2014.
21. Rao, T.S.S.R.K.: Best constrained approximation in Banach spaces, *Numerical Functional Analysis and Optimization*, **36**, 248-255, 2015.
22. Rao, T.S.S.R.K.: Approximation properties for spaces of Bochner integrable functions, *Journal of Mathematical Analysis and Applications*, **423**, 1540-1545, 2015.
23. Rao, T.S.S.R.K.: Existence sets of best coapproximation and Projections of norm one, *Monatshefte für Mathematik*, **176**, 607-614, 2015.
24. Rao, T.S.S.R.K.: On intersections of ideals in Banach spaces, *Houston Journal of Mathematics*, **41**, 589-594, 2015.
25. Sahoo, B.K. and Sastry, N.S.N.: Binary code for the symplectic generalized quadrangle of even order, *Des. Codes Cryptogr.*, Springer, 2015.
26. Sarkar, Jaydeb: Jordan Blocks of  $H^2(\mathbb{D}^2)$ , *Journal of Operator theory*, **72**, 371-385, 2014.
27. Sarkar, Jaydeb: Submodules of the Hardy module over polydisc, *Israel Journal of Mathematics*, **205**, 317-336, 2015.
28. Sarkar, Jaydeb: Operator Theory on Symmetrized Bidisc, *Indiana University Mathematics Journal*, **64**, 847 - 873, 2015.
29. Sreekantan, Ramesh: Higher Chow cycles on Abelian surfaces and a non-Archimedean analogue of the Hodge-D-conjecture, *Compos. Math.*, **150 (4)**, 691–711, 2014.
30. Nikolov, Nikolay and Sury, B.: Bounded generation of wreath products, *Journal of Group Theory*, Published online on 27.02.2015, DOI 10.1515/jgth-2015-0006.
31. Sury, B.: A polynomial parent to a Fibonacci-Lucas relation, *The Amer. Math. Monthly*, **121**, 236, 2014.
32. Sury, B.: A heuristic argument to Hua's identity using geometric series, *The Amer. Math. Monthly*, **121**, 522, 2014.
33. Sury, B.: Some applications of Representation Theory to Classical Number Theory, *Mathematics Newsletter*, Ramanujan Mathematical Society, **25**, 130-139, 2014.

34. Biswas, Indranil, Mj, Mahan and Thakur, Ajay Singh: Infinitesimal deformations and Brauer group of some generalized Calabi-Eckmann manifolds, *Tokyo J. of Math.*, **37 (1)**, 61-72, 2014.

#### Papers published in Conference Proceedings

1. Raja, C. R. E.: Liouville property on  $G$ -spaces, *Proceedings of the Conference on Recent Trends in Ergodic Theory and Dynamical Systems*, Contemporary Mathematics, **631**, AMS, Providence, Rhode Island, 21-31, 2015.

#### Papers published Books

1. Blaszczyzyn, B. and Yogeshwaran, D.: Clustering comparison of point processes with applications to random geometric models, *Stochastic Geometry, Spatial Statistics and Random Fields*, V. Schmidt. (ed.), Lecture Notes in Mathematics, Springer, 31-71, 2015.

## 2015-2016

#### Papers published in journals

1. Adler, Robert J. and Yogeshwaran, D.: On the topology of random complexes built over stationary point processes, *Ann. Appl. Probab.*, **25 (6)**, 3338-3380, 2015.
2. [Bagchi, Bhaskar](#): The mu vector, Morse inequalities and a generalized lower bound theorem for locally tame combinatorial manifolds, *European J. Combin.*, **51**, 69–83, 2016.
3. [Bhat, B. V. Rajarama](#); [Chattopadhyay, Arup](#) and [Kosuru, G. Sankara Raju](#): On submajorization and eigenvalue inequalities, *Linear Multilinear Algebra*, **63 (11)**, 2245–2253, 2015.
4. [Bhat, B. V. Rajarama](#) and [Skeide, Michael](#): Pure semigroups of isometries on Hilbert  $C^*$ -modules, *J. Funct. Anal.*, **269 (5)**, 1539–1562, 2015.
5. Botelho, F. and Rao, T. S. S. R. K.: On algebraic reflexivity of sets of surjective isometries between spaces of weak continuous functions, *Journal of Mathematical Analysis and applications*, **432**, 367-373, 2015.
6. [Chakrabarti, Debraj](#) and [Gorai, Sushil](#): Function theory and holomorphic maps on symmetric products of planar domains, *J. Geom. Anal.*, **25 (4)**, 2196–2225, 2015.
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