

## PUBLICATIONS OF ATUL DIXIT

1. Orthopoles and the Pappus theorem (with D. Grinberg), *Forum Geom.*, **4** (2004), 53-59.
2. Monotonicity of quotients of theta functions related to an extremal problem on harmonic measure (with A. Yu. Solynin), *J. Math. Anal. Appl.*, **336**, No. 2 (2007), 1042-1053.
3. The Laplace Transform of the psi function, *Proc. Amer. Math. Soc.*, **138**, No. 2 (2010), 593-603.
4. Series transformations and integrals involving the Riemann  $\Xi$ -function, *J. Math. Anal. Appl.*, **368** (2010), 358-373.
5. A transformation formula involving the Gamma and Riemann zeta functions in Ramanujan's Lost Notebook (with B.C. Berndt), *The legacy of Alladi Ramakrishnan in the mathematical sciences*, K. Alladi, J. Klauer, C. R. Rao, Eds, Springer, New York, 2010, pp. 199-210.
6. Character analogues of theorems of Ramanujan, Koshliakov and Guinand (with B.C. Berndt and J. Sohn), *Adv. Appl. Math.*, **46**, (2011), 54-70. (Special issue in honor of Dennis Stanton).
7. Analogues of a transformation formula of Ramanujan, *Int. J. Number Theory*, **7**, No. 5 (2011), 1151-1172.
8. Transformation formulas associated with integrals involving the Riemann  $\Xi$ -function, *Monatsh. Math.*, **164**, No. 2 (2011), 133-156.
9. Convexity of quotients of theta functions (with A. Roy and A. Zaharescu), *J. Math. Anal. Appl.*, **386**, No. 1 (2012), 319-331.
10. Character analogues of Ramanujan type integrals involving the Riemann  $\Xi$ -function, *Pacific J. Math.*, **255**, No. 2, (2012), 317-348.
11. Analogues of the general theta transformation formula, *Proc. Royal Soc. Edinburgh, Sect. A*, **143** (2013), 371-399.
12. Rank-Crank type PDEs and generalized Lambert series identities (with S.H. Chan and F.G. Garvan), *Ramanujan J.*, **31**, Issue 1-2 (2013), 163-189 (Special issue in honor of Mourad Ismail and Dennis Stanton).
13. Generalized higher order spt-functions (with A. J. Yee), *Ramanujan J.*, **31**, Issue 1-2 (2013), 191-212 (Special issue in honor of Mourad Ismail and Dennis Stanton).
14. Ramanujan's ingenious method for generating modular-type transformation formulas, *The Legacy of Srinivasa Ramanujan*, RMS-Lecture Note Series, No. 20 (2013), pp. 163-179.
15. From sequences to polynomials and back, via operator orderings (with T. Amdeberhan, V. De Angelis, V. H. Moll and C. Vignat), *J. Math. Phys.*, **54**, 123502 (2013).
16. Monotonicity results for Dirichlet L-functions, (with A. Roy and A. Zaharescu), *J. Math. Anal. Appl.*, **410**, No. 1 (2014), 307-315.
17. The Zagier modification of Bernoulli numbers and a polynomial extension. Part I. (with V. H. Moll and C. Vignat), *Ramanujan J.*, **33**, No. 3 (2014), 379-422.
18. The unimodality of a polynomial coming from a rational integral. Back to the original proof (with T. Amdeberhan, X. Guan, L. Jiu and V. H. Moll), *J. Math. Anal. Appl.*, **420** (2014), 1154-1166.
19. The Zagier polynomials. Part II. Arithmetic properties of coefficients (with M. Coffey, V. De Angelis, V. H. Moll, A. Straub and C. Vignat), *Ramanujan J.*, **35**, Issue 3 (2014), 361-390.
20. Self-reciprocal functions, powers of the Riemann zeta function and modular-type transformations (with V. H. Moll), *J. Number Thy.* **147** (2015), 211-249.
21. Zeros of combinations of Riemann  $\xi$ -function on bounded vertical shifts (with N. Robles, A. Roy and A. Zaharescu), *J. Number Thy.* **149** (2015), 404-434.
22. Ramanujan-Hardy-Littlewood-Riesz phenomena for primitive Hecke forms (with A. Roy and A. Zaharescu), *J. Math. Anal. Appl.*, **426** (2015), 594-611.
23. The finite Fourier transform of classical polynomials (with L. Jiu, V.H. Moll and C. Vignat), *J. Austral. Math. Soc.*, **98** No. 2 (2015), 145-160.
24. Partitions associated with the Ramanujan/Watson mock theta functions  $\omega(q)$ ,  $\nu(q)$  and  $\phi(q)$  (with G. E. Andrews and A. J. Yee), *Research in Number Theory*, **1**, Issue 1 (2015), 1-25.

25. Riesz-type criteria and theta transformation analogues (with A. Roy and A. Zaharescu), *J. Number Theory* **160** (2016), 385-408.
26. Koshliakov kernel and identities involving the Riemann zeta function (with N. Robles, A. Roy and A. Zaharescu), *J. Math. Anal. Appl.* **435** No. 2 (2016), 1107-1128.
27. A hypergeometric inequality (with V. H. Moll and V. Pillwein), *Ann. Comb.* **20** (2016), 65-72.
28. Asymptotics and exact formulas for Zagier polynomials (with M. L. Glasser, V. H. Moll and C. Vignat), *Research in Number Theory*, **2** (1) (2016), 1-26.
29. New Pathways and Connections in Number Theory and Analysis Motivated by Two Incorrect Claims of Ramanujan (with B. C. Berndt, A. Roy and A. Zaharescu), *Adv. Math.* **304** (2017), 809-929.
30. Error functions, Mordell integrals and integral analogue of partial theta function (with A. Roy and A. Zaharescu), *Acta Arith.* **177** No. 1 (2017), 1-37.
31. Modified Nörlund polynomials (with A. Kabza, V. H. Moll and C. Vignat), *Ramanujan J.* **42** (2017), 69-96.
32. On a theorem of A. I. Popov on sums of squares (with B. C. Berndt, S. Kim and A. Zaharescu), *Proc. Amer. Math. Soc.* **145**, No. 9 (2017), 3795-3808.
33. Overpartitions related to the mock theta function  $\omega(q)$  (with G.E. Andrews, D. Schultz and A. J. Yee), *Acta Arith.* **181** No. 3 (2017), 253-286.
34. New representations for  $\sigma(q)$  via reciprocity theorems (with Koustav Banerjee), in *Analytic Number Theory, Modular Forms and q-Hypergeometric Series* (in honor of Krishnaswami Alladi's 60th birthday), Springer Proceedings in Mathematics and Statistics, 2017, pp. 39-57.
35. A generalized modified Bessel function and a higher level analogue of the theta transformation formula (with A. Kesarwani and V. H. Moll; with an Appendix by Nico M. Temme), *J. Math. Anal. Appl.*, **459** (2018), 385-418.
36. Zeros of combinations of the Riemann  $\Xi$ -function and the confluent hypergeometric function on bounded vertical shifts (with Rahul Kumar, Bibekananda Maji and Alexandru Zaharescu), *J. Math. Anal. Appl.*, **466** (2018), 307-323.
37. Sums of squares and products of Bessel functions (with B. C. Berndt, S. Kim and A. Zaharescu), *Adv. Math.* **338** (2018), 305-338.
38. Modular-type transformations and integrals involving the Riemann  $\Xi$ -function, *Math. Student* **87** Nos. 3-4 (2018), 47-59.
39. Generalized Lambert series and arithmetic nature of odd zeta values (with Bibekananda Maji), *Proceedings of the Royal Society of Edinburgh, Section A: Mathematics*, 1-29 (2019) <https://doi.org/10.1017/prm.2018.146>
40. Generalized Lambert series, Raabe's cosine transform and a generalization of Ramanujan's formula for  $\zeta(2m+1)$  (with Rajat Gupta, Rahul Kumar and Bibekananda Maji), *Nagoya Mathematical Journal*, 1-62 (2019) <https://doi.org/10.1017/nmj.2018.38>
41. A simple proof of a congruence for a series involving the little  $q$ -Jacobi polynomials, to appear in *Annals of Combinatorics* (Special Issue in the honor of George E. Andrews' 80<sup>th</sup> birthday).
42. Partition implications of a three parameter  $q$ -series identity (with Bibekananda Maji), provisionally accepted for publication in *The Ramanujan Journal*.
43. Untrodden pathways in the theory of the restricted partition function  $p(n, N)$  (with Pramod Eyyunni, Bibekananda Maji and Garima Sood), submitted for publication.
44. A Ramanujan-type formula for  $\zeta^2(2m+1)$  (with Rajat Gupta), submitted for publication.

## Expository Papers

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1. The integrals in Gradshteyn and Ryzhik. Part 28. The confluent hypergeometric function and Whittaker functions (with V. H. Moll), *Scientia, Series A*, 26 (2015), 49-61.
2. The integrals in Gradshteyn and Ryzhik. Part 30. Trigonometric functions (with T. Amdeberhan, X. Guan, L. Jiu, A. Kuznetsov, V. H. Moll and C. Vignat), *Scientia, Series A*, 27 (2016), 47-74.

## Books (Editor)

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1. V. R. Thiruvengatachar and K. Venkatachaliengar, Ramanujan at Elementary Levels: Glimpses, Bruce C. Berndt, Atul Dixit, Victoria J. Reuter, Ping Xu, and Boonrod Yuttanan, eds., Ramanujan Mathematical Society, Lecture Note Series, No. 24, 2016.