CURRICULUM VITAE

NAME: Krishnaswami Alladi

PRESENT POSITION: Professor

ADDRESS: Department of Mathematics
University of Florida
Gainesville, Florida 32611, USA
Ph: (352) 294-2290
e-mail: alladik@ufl.edu

BORN: October 5, 1955, Trivandrum, India

DEGREES: Ph.D., U.C.L.A. - 1978; Advisor-E.G. Straus
M.A., U.C.L.A. - 1976
B.Sc., Madras University, India - 1975

RESEARCH INTERESTS: Number Theory - Analytic Number Theory, Sieve Methods, Probabilistic Number Theory, Diophantine Approximations, Partitions, q-hypergeometric identities

PROFESSIONAL EXPERIENCE:

Professor, University of Florida, 1989-present.
Chairman, Department of Mathematics, University of Florida, 1998-2008
Associate Professor, University of Florida, 1986-89
Associate Professor, Institute of Mathematical Sciences, Madras, India, 1981-1986.
Visiting Professor, Penn State University, 1992-93, Fall 94, Fall 2012, Fall 2022
Visiting Associate Professor, University of Hawaii, Honolulu, 1984-1985.
Visiting Associate Professor, University of Texas, Austin, 1982-1983.
Visiting Member, Institute for Advanced Study, Princeton, 1981-1982.
T.H. Hildebrandt Research Assistant Professor, University of Michigan, 1978-81

AWARDS AND HONORS:

Special Volume of *The Ramanujan Journal* (Springer) in my honor announced in 2024 (G. E. Andrews & K. Ono - Eds., deadline for submissions June 30, 2025)
Honorary Doctorate of Science (Honoris Causa), Sept. 2022, by SASTRA University for my distinguished contributions to mathematics (citation on p. 18).
Conference in honor of my 60th birthday, University of Florida, Mar 2016 (Refereed Proceedings published - Springer 2018)
Elected Inaugural Fellow of the American Mathematical Society in 2012-13.
STEP/SPP Awards for distinguished performance as Full Prof. twice: 2001, 2010
TIP Award for distinguished teaching, University of Florida, 1994-95.
CLAS Research Awards at University of Florida thrice: 1987, 1994, 2000
Alumni Medal for one of 5 best Ph.D. theses (all subjects), UCLA (1978).
Chancellor's Fellowship for the Ph.D., 1975-78, UCLA

GRANTS: (Peer reviewed federal research grants and conference grants)

National Science Foundation (NSF) Grant for Conference on "Ramanujan 125", University of Florida, Nov 2012 (PI: Frank Garvan; Co-PI: Krishnaswami Alladi)

National Security Agency (NSA) Grant for Conference on "Ramanujan 125", University of Florida, Nov 2012 (PI: Frank Garvan; Co-PI: Krishnaswami Alladi)

NSA Grant MSPF-08G-154 - Krishnaswami Alladi (PI), Alexander Berkovich (Co-PI), Frank Garvan (Co-PI) - at the University of Florida, 2008-11.

NSF Grant for Conferences, Student Workshop, and Focused Weeks on Quadratic and Higher Degree Forms, Program in ANTC, University of Florida, 2008-11.

NSF Grant for Conference and Student Workshop on Partitions, Q-series and Modular Forms as part of the Program in Algebra, Number Theory and Combinatorics (ANTC) at the University of Florida, March 2008.

Indo-US Forum Grant (DST, India and the Smithsonian Institution, USA), for organizing Int'l Conf on Number Theory and Combinatorics, at SASTRA University, India, Dec 19-22, 2006.

NSA Grant(MSPF-06G-150) - Krishnaswami Alladi (PI), Alexander Berkovich (Co-PI), Frank Garvan (Co-PI) - at the University of Florida, 2006-09.

Indo-US Forum Grant (DST, India and the Smithsonian Institution, USA), for organizing Int'l Conf on Number Theory and Mathematical Physics, at SASTRA University, India, Dec 20-22, 2005.

Indo-US Forum Grant, Dept of Science and Technology (DST), India, and the Smithsonian Institution, USA, Int'l Conf on Fourier Analysis and Number Theory, at SASTRA University, Kumbakonam (Ramanujan's hometown), India, Dec 20-22, 2004.

Number Theory Foundation (NTF) Grant for organizing Conf. at SASTRA Univ, India, Dec. 2003.

Indo-US Forum Grant, DST, India and The National Academy of Sciences, USA) for Int'l Conf on Number Theory and Secure Communications at SASTRA University, Kumbakonam (Ramanujan's hometown), India, Dec 20-22, 2003 inaugurated by the President of India.

N.S.F. Grant at University of Florida, Gainesville (2000-04), DMS-0088975.

N.T.F. "Number Theory Foundation" Grant at University of Florida, Spring 2000.

N.S.F. Grant at University of Florida, Gainesville (1994-98), DMS-9400191.

Supported by N.S.F. Grant MCS 77-18723-A04 at Institute for Advanced Study, Princeton (1981-82)

N.S.F. Grant at University of Michigan, Ann Arbor (1979-80), MCS 78-02685

ORGANIZATIONS:

Member of The American Mathematical Society (AMS)

EDITORSHIP: JOURNALS AND BOOK SERIES

Founding Editor-in-Chief: *The Ramanujan Journal* (Springer) 1997 - 2024 and continuing (research journal devoted to areas influenced by Srinivasa Ramanujan).

Founding Editor of book series: *Developments in Mathematics* (Springer),1998-2024 and continuing (publishes Refereed Conf Proceedings and Research Monographs)

Editor - *The Mathematics Student* (India), 2015 - 2022.

Editor - *Notices of the American Mathematical Society*, 2009-15.

Editor - *Springer Briefs in Mathematics*, 2011-14

OTHER PROFESSIONAL ACTIVITIES:

Chair: SASTRA Ramanujan Prize Committee- 2005 to 2024 and continuing.

Organizer of annual Int'l Conferences on Number Theory at SASTRA University, Kumbakonam, India (Ramanujan's hometown) 2003 - 2024, and continuing.

Chair or Member of External Reviews Teams (ERT) for Math Programs (BS and MS)in the Middle East since 2007. Most were External Reviews just for Mathematics, while a few were for the College of Science (as indicated below) in which case I was the sole member of the ERT for Math:

AS CHAIR OF ERT FOR:

Khalifa University, Abu Dhabi, UAE, 2022

American University of Sharjah, UAE, in 2007, 2011, 2018

King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, 2009

University of Sharjah, UAE, in 2007

As MEMBER OF ERT FOR

Emirates Aviation University, Dubai, UAE, 2023

College of Science, United Arab Emirates University, Al Ain, UAE, 2017

College of Science, NYU - Abu Dhabi, UAE, 2015

Balamand University, Dubai, UAE, 2015

King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, 2012

Member, American Mathematical Society (AMS) Committee on Committees, 2009-11 (Advisory to the President of the AMS)

Member: External Review Committee for Math Dept, Louisiana State University, Baton Rouge in 2004

Chair of Program Committee (to select the one hour speakers) of the Southeastern Section of the American Mathematical Society, 2003.

Member of Program Committee (to select the one hour speakers) of the Southeastern Section of the American Mathematical Society, 2002.

Organizer, International Number Theory Symposium, Anna University, Madras, India, January 1996. The Refereed Proceedings was published in 1997 as Issue 4, Vol 1, of *The Ramanujan Journal* under my editorship.

Elected to Panel of Visiting Lecturers, Math Association of America, 1991-1994.

Organizer of a Symposium on Number Theory at the International Conference for Srinivasa Ramanujan's Centennial, Anna University, Madras, India, Dec 1987. The Refereed Proceedings appeared as *Springer Lecture Notes* 1395 under my editorship.

Organizer for Number Theory Conferences for "Matscience" in India, June (1981) and January (1984). The Refereed Proceedings of these meetings appeared as *Springer Lecture Notes* 958 and 1122, respectively, under my editorship.

Organizer of a special session on Number Theory at the A.M.S. regional meeting in Notre Dame, March (1981).

DISSERTATIONS DIRECTED/DIRECTING AS COMMITTEE CHAIR:

YAZAN ALAMOUDI, my current PhD student, passed Oral Qual Exam Jan 27, 2025(Advanced to Candidacy). His talk was on three themes: (i) "A bijective proof of Andrews' refinement of the Alladi-Schur theorem", (ii) On q-hypergeometric series associated with the partition theorems of Lebesgue, Schur

and Capparelli, and (iii) "Some asymptotic results on sifted sums involving the Moebius function and the number of prime factors". Paper on (i) submitted for publication (Dec 2024) - see also arXiv 2410.15630 [mathNT]. Paper on (ii), jointly with me (submitted, Jan 2025). Paper on (iii) jointly with me (under preparation).

SROYON SENGUPTA, my current PhD student, passed Oral Qual Exam in Nov 2024 (Advanced to Candidacy). His talk was on two themes: (i)"Algebraic analogues of results of Alladi-Johnson using the Chebotarev density theorem" , and (ii) "Higher order duality between prime factors and primes in arithmetic progressions", Paper on (i) submitted for publication Oct 2024 - see also arXiv 2410.22226 [math.NT]. Paper on (ii) is jointly with me (under preparation)

JASON JOHNSON"Some new results on the Moebius function in analytic number theory", University of Florida, Thesis Defense passed on Dec 4, 2024; will graduate in Spring 2025

ANKUSH GOSWAMI, "Some problems in analytic number theory", University of Florida, Spring 2019 (PhD)

TODD MOLNAR, "On the local distribution of the number of small prime factors", University of Florida, Spring 2017 (PhD)

TODD MOLNAR, "A study of the anatomy of the integers via large prime factors", University of Florida, 2012 (Masters)

FRANK DANIELS, "The rank parity function of Srinivasa Ramanujan", University of Florida, 1994 (PhD)

ZOLTAN RETI, "Five problems in Combinatorial Number Theory", University of Florida, 1994(PhD)

SALAI DHAVAKODI, "On the parity of the number of small prime factors of integers", University of Florida, 1992(PhD)

DEPARTMENTAL SERVICE:

Grad Selection Committee, 1987-88, 2009-12, 2016-25
Tenure and Promotion Committee, 1991-92, 1995-98, 2011-25
Colloquium/Visitors Committee, 1993-94, 2009-25;
Search Committee 1988-90, 1990-91, 2018-19;
Hiring Plan Committee 2009-15.
CHAIR - Mathematics Department 1998-2008
TIP Awards Committee 1993-94. *Chair*: TIP Awards Committee, 1995-96.
Steering Committee 1988-90.

Highlights: Service as Chairman of the Mathematics Department:

As Chair I initiated a number of successful programs aimed at getting increased visibility and recognition of our research within campus and internationally and in enhancing collaboration with other disciplines. They include:
The Annual Erdös Colloquium in Pure Mathematics launched in 1998-99
The Annual Ulam Colloquium in Applied Mathematics launched in 1998-99
Special Year Programs launched in 2001-02
John G. Thompson Research Assistant Professorship launched in 2002-03
The Annual Ramanujan Colloquium launched in 2007
A vibrant program in biomath launched in 1999-00

Recognition of service as Mathematics Chair: (i) Invited by the Board of Mathematical Sciences to speak at the Annual Mathematics Chairs Colloquium, held at the National Academy of Sciences, Washington D.C. in November 2002. The title of my talk was *Enhancing visibility and strengthening ties with other disciplines.*

(ii) Invited to be one of four Workshop Leaders for a three year period starting 2005 for the Mathematics Chairs Workshops by the American Mathematical Society in conjunction with their Annual Meetings in Atlanta (Jan 2005), San Antonio (Jan 2006) and New Orleans (Jan 2007).

INVITED TALKS AT CONFERENCES & COLLOQUIA OUTSIDE UF

Colloquium and Seminar talks outside UF:

COLLOQUIUM TALKS OUTSIDE UF SINCE JANUARY 2020:

Indian Institute of Technology, Gandhinagar, India (Dec 2024)
Math Ecstacy Group of India, (Aug 15, 2024 - for India's Independence Day)
Technical University of Graz, Austria (March 2024),
University of Westchester, PA (Sept 2023),
Academy of Sciences, Chennai, India (Aug 2023),
Institute of Mathematical Sciences, Chennai, India (Aug 2023),
Pennylvania State University(Oct 2022)
Research Inst. Symbolic Computation, Linz, Austria (Sept 2022)
(No Colloquium Talks in 2020-21 due to Covid closure)
COLLOQUIUM TALKS OUTSIDE UF PRIOR TO 2020:
Bhaskharacharya Prathisthana, Pune, India (2019), IIT Bombay (2019), Baylor Univ. (2019), Univ. Mauritius (2017), Research Inst. Symbolic Computation, Linz, Austria (2016), University of Vienna (2016), Alfred Renyi Inst., Budapest (2016), Univ. North Carolina, Greensboro (2016), MATSCIENCE, Madras, India (2015), Korea Inst. Adv Studies, Seoul, (2015), Korea Inst. Tech., Seoul (2015), Univ. Illinois, Urbana (2014), UCF (2014), Univ Ankara (2014), Bilkent Univ, Ankara (2014), Hacceteppe Univ, Ankara (2014), Auburn Univ (2013), Hebrew Univ., Jerusalem (2013), Tata Inst. Fund, Research, India (2013), Penn State (2013), Univ. Hawaii, Honolulu (2011), IUPUI, Indianapolis (2010), Georgia Southern (2010), Georgia Tech (2010), UIUC (2008), Brigham Young (2008), Spanish Acad. Sci., Madrid (2006), Univ. Hyderabad, India (2006), Shanghai (2006), Penn State (2005), Inst. Experimental Math., Essen (2005), Harisch Chandra Inst. Allahabad, India (2004), Int'l Centre Theor. Phys., Trieste, Italy (2004), Arizona State (2004), Tata Inst., Bangalore, India (2003), Penn State (2003), Academia Sinica, Beijing (2002), Northwest Univ., Xian, China (2002), Univ. Kinki, Iizuka, Japan (2002), Univ. Sussex, Brighton, England(2002), Univ. Hawaii, Honolulu (2002),(2001), Univ Vienna (2000), Res. Inst. Symbolic Computation, Linz, Austria (2000), Acad. Sinica, Beijing (1999), Peking Univ. Beijing (1999), Jaio Tomg Univ. Shanghai (1999), UIUC (1999), Nat'l Univ. Singapore (1999), USF (1998), Univ. Hawaii, Honolulu (1997), Univ. Colorado, Boulder (2006), Univ. Hawaii, Honolulu (1995), UCLA (1995), Inst. Henri Poincare, Paris (1995), Univ. Nancy, France (1995), Univ. Lyon (1995), Nat'l Univ. Singapore (1995, 94), Int'l Centre, Theor. Phys., Trieste Italy, (1993), Inst. Henri Poincare, Paris (1993), Univ. Nancy, France (1993), Univ. Lyon, France (1993), Univ. Nice (1993), UIUC (1992), U.C.L.A. (1992), Penn. State (1992), UCF (1990), Nat'l Univ. Singapore (1990,

1988, 1987), Philadelphia (1987), Durham N.H. (1987), Univ. Hawaii, Honolulu (1987), Inst. Henri Poincare, Paris (1986), Univ. Nancy (1986), Univ. Bordeaux (1986), Univ. Stuttgart (1986), Univ. Hawaii, Honolulu (1986), Univ. Arizona, Tucson (1985), Univ. Colorado, Boulder (1985), Oklahoma St. Univ., Stillwater (1983), Univeritaat Ulm (1983),Univ.Franjurt, Germany (1983), Univ. Hawaii, Honolulu (1983), Univ.Alberta, Ed,omton (1982), Univ. Br. Columbia, Vancouver (1982), Univ. Bonn (1980), Univ. Frankfurt (1980), Universitat Heidelberg (1979), Universitat Ulm (1979), Univ. Colorado, Boul;der (1978).

SEMINAR TALKS OUTSIDE OF UF SINCE JANUARY 2020:
Indian Institute of Technology, Gandhinagar, India (Dec 2024)
Michigan Technological University (Dec 2024)
Pennsylvania State University(Oct and Nov 2022)
Research Inst. Symbolic Computation, Linz, Austria (Sept 2022)
Louisiana State University, Baton Rouge (March 2022)
(No seminar talks during 2020 and 2021 due to Covid closure)

SEMINAR TALKS OUTSIDE OF UF PRIOR TO 2020:

Emory Univ. (2019, 2017), Univ. Mauritius (2017) Research Inst. Symbolic Computation, Linz, Austria (2016), University of Vienna (2016), Univ. Ankara, Turkey (2014), Penn State (2013), Koc Univ., Istanbul (2012), Rutgers (2020), Emory (2009), UIUC (2008), Brigham Young (2008), Penn State (2008), Valencia. Spain (2006), Penn State (2005), Inst. Experimental Math., Essen, Germany (2005), Harish Chandra Inst., Allahabad, India (2004), Northwest Univ., Xian, China (2004), Ohio State (2004), Raman Research Inst. Bangalore, India (2003), Nat'l Univ., Singapore (2001), Peking Univ., Beijing (1999), Tongji Univ., Shanghai (1999), UIUC (1999), Nat'l Univ. Singapore (1997), Univ. Colorado, Boulder (1996), Penn State Univ. (1994), Inst. Henri Poincare, Paris (1993), UIUC (1992), UCLA (1992), Penn. State (1992), Tata Inst. Dund Research, Bombay, India (1991), U Georgia (1986), Inst. Henri Poincare, Paris (1986), CUNY (1982), Institite for Advanced Study, Princeton (1981), U. Michigan (1977), U Maryland (1976).

Invited talks at meetings:

INVITED TALKS AT MEETINGS AFTER JOINING UF IN DEC 1986

CONFERENCE TALKS SINCE JANUARY 2020:

128) One hour talk, Int'l Conf. on Number Theory, SASTRA Univ., Kumbakonam, India, Dec 2024

127) Invited Talk, Int'l Conf. on Number Theory and Related Topics, Inst. Mathematical Sciences, Chennai, India, Dec 2024

126) Invited talk, Special Session on Partitions, AMS Sectional Meeting, Savannah, GA, Sept 2024

125) One hour address, Legacy of Ramanujan Conf. in honor of George Andrews and Bruce Berndt for their 85th birthdays, Penn State Univ., June 2024

124) Invited talk, International Conf. on Modular Forms, q-Hypergeometric Series, and Partitions, Univ. Cologne, Germany, Mar 2024

123) Invited Talk, SASTRA Ramanujan Conference, SASTRA Univ., India, Dec 2023

122) Invited Talk, SASTRA Ramanujan Conference, SASTRA Univ., India, Dec 2022

121) Invited address, Conference on 100 years of Ramanujan's Mock Theta Functions, Vanderbilt University, May 2022

120) One hour talk, Int'l Number Theory Conference for the Centenary of Prof. M. V. Subbarao, IISER Pune, India, July 2021 (via Zoom, due to Covid closure)

119) Opening One Hour Address, Int'l Conference in memory of Ramanujan for his 100th Death Anniversary, IIT-Benares Hindu University, Varanasi, India, Dec 2020 (via ZOOM due to Covid closure)

118) One Hour Talk, Int'l Conference for Ramanujan's 100th Death Anniversary, Ramanujan Math Soc., India, Dec 2020 (via ZOOM due to Covid closure)

CONFERENCE TALKS PRIOR TO JANUARY 2020:

117) One Hour Talk, Int'l Conference on Number Theory in honor of Bruce Berndt for his 80th Birthday, Univ. Illinois, Urbana, June 2019

116) Invited Address, Ramanujan Conference, SASTRA Univ., India, Dec. 2018

115) Invited Address, Conf. at The Royal Society to commemorate the Centenary of Ramanujan's Election as FRS, London, England, Oct. 2018

114) One hour talk, Conf. on Combinatory Analysis, Nankai Univ., China, July 2018

113) Opening Plenary Talk, Conf. at Penn State Univ (for 80th Birthday of George Andrews), June 2018

112)40 min talk, Italy Conf. on Discrete Math. (DISCRETALY), Rome, Feb 2018

111) 45 minute talk, SASTRA Conference on Number Theory, Kumbakonam, India, Dec. 2017

110) One hour talk, SASTRA Conference on Number Theory, Kumbakonam, India, Dec. 2016

109) One hour lecture, PANTS Conference, UNC Greensboro, Sept 2016

108) Invited 30 min talk, Conference on Lattice Paths Combinatorics, Cal Poly, Pomona, Aug 2015

107) Invited 30 minute talk, Illinois Number Theory Conference, Urbana, Aug. 2015

106) Invited Special Session talk, SIAM Summer Meeting, Gaithersberg, Maryland, June 2015

105) Invited 45 min talk, International Conference on Algebra and Number Theory, Samsun, Turkey, Aug 7, 2014

104) Invited 30 min talk, International Conference on Number Theory and Galois Representations, SASTRA University, Kumbakonam, India, Dec 21, 2013.

103) One hour talk, Conference on the Combinatorics of Partitions in honor of George Andrews for his 75-th birthday, Nankai Univ., Tianjin, China, Aug. 2, 2013

102)Invited 30 min talk, Erdös Centennial Conference, Budapest, Hungary, July 4, 2013.

101) Invited Speaker (one hour), Ramanujan 125-th Anniversary Legacy Conference, Ramanujan Mathematical Society, New Delhi, India, Dec 17-22, 2012.

100) Invited 40 min talk, International Conference on Number Theory, Ergodic Theory, and Dynamics, SASTRA University, Kumbakonam, India, Dec 22, 2011.

99) Invited 45 minute talk, Conference on Partitions, Emory University, Atlanta, Georgia, Jan 2011

98) Invited 40 min talk, MAA Session on the Beauty and Power of Number Theory, Joint Annual Meeting of the American Mathematical Society and the Mathematical Association of America, New Orleans, Jan 2011

97)Invited half hour talk, International Conference on Number Theory and Automorphic Forms, SASTRA University, Kumbakonam, India, Dec 2010

95)Invited hour talk, International Conference on the Renaissance of Combinatorics for Doron Zeilberger's 60-th birthday, Nankai University, China, Aug 2010

94)Invited half hour speaker, International Conference on Number Theory and Mock Theta Functions, SASTRA University, Kumbakonam, India, Dec 2009.

93)One hour address, Ramanujan Revisited - International Conference for Venkatachaliengar's Centenary, Bangalore, India, June 2009.

92) One hour speaker, International Conference on Number Theory and Modular Forms, SASTRA University, Kumbakonam, India, Dec 2008.

91) One hour speaker, Combinatory Analysis 2008, Conference in honor of George Andrews for his 70-th birthday, Penn State University, Dec 2008.

90)Invited Speaker, Special Session on Ramanujan, Mathematical Association of America MathFest, Madison, Wisconsin, Aug 2008

89) One hour speaker, International Conference on Number Theory, Special Functions, and Mathematical Physics, SASTRA University, Kumbakonam, India, Dec 2007.

88) Principal speaker (45 mins), Conference on Combinatorial and Additive Number Theory, CUNY Graduate Center, May, 2007.

87) One hour speaker, International Conference on Number Theory and Combinatorics, SASTRA University, Kumbakonam, India, Dec 2006.

86) Invited speaker, Fourth China-Japan Number Theory Conf., Weihai, Aug 2006

85) One hour speaker, International Conference on Number Theory and Mathematical Physics, SASTRA University, Kumbakonam, India, Dec 2005.

84) Invited 40 min talk, MAA Session on the Beauty and Power of Number Theory, Joint Annual Meeting of the American Mathematical Society and the Mathematical Association of America, New Orleans, Jan 2011

83) Invited half hour talk, International Conference on Number Theory and Automorphic Forms, SASTRA University, Kumbakonam, India, Dec 2010

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79) One hour speaker, International Conference on Number Theory and Modular Forms, SASTRA University, Kumbakonam, India, Dec 2008.

78) One hour speaker, Combinatory Analysis 2008, Conference in honor of George Andrews for his 70-th birthday, Penn State University, Dec 2008.

77) Invited Speaker, Special Session on Ramanujan, Mathematical Association of America MathFest, Madison, Wisconsin, Aug 2008

76) One hour speaker, International Conference on Number Theory, Special Functions, and Mathematical Physics, SASTRA University, Kumbakonam, India, Dec 2007.

75) Principal speaker (45 mins), Conference on Combinatorial and Additive Number Theory, CUNY Graduate Center, May, 2007.

74) One hour speaker, International Conference on Number Theory and Combinatorics, SASTRA University, Kumbakonam, India, Dec 2006.

73) Invited Speaker, Fourth China-Japan Number Theory Conf., Weihai, Aug 2006

72) one hour speaker, International Conference on Number Theory and Mathematical Physics, SASTRA University, Kumbakonam, India, Dec 2005.

71) Invited Speaker, International Conference on Probability and Number Theory, Kanazawa, Japan, June 2005.

70) Invited Speaker, Conference on Combinatorial and Analytic Number Theory (CANT 05) in honor of Mel Nathanson, City University of New York, May 2005

69) Srinivasa Ramanujan Commemmoration Lecture, SASTRA University, Kumbakonam, India, December 22, 2004.

68) Invited Speaker (one hour), International Conference on Fourier Analysis and Number Theory, Srinivasa Ramanujan Centre at SASTRA University, Kumbakonam, India, December 2004.

67) Invited speaker (one hour), Conference in honor of George Andrews for his election to the National Acad. Sci., Penn. State Univ., April 2004.

66) Invited opening speaker, (one hour) Third China Japan Conference on Number Theory, Xian, China, Feb. 2004.

65) Invited one hour speaker, International Conference on Number Theory and Secure Communications in memory of Ramanujan (inaugurated by the President of India), Kumbakonam, India, Dec. 2003.

64) Invited opening speaker, International Conference on Number Theory, Bangalore, India, Dec. 2003.

62) Invited Speaker (one hour), International Conference on Point Processes, Madras, India, August 2003.

62) One hour speaker, International Conference on Topology, Zeta Functions and Quantum Physics, University of Kinki, Osaka, Japan, March, 2003.

61) Invited to give Weissman Public Lecture of the City University of New York, November 2002.

60) Invited speaker, International Conference on Group Theory in honor of John G. Thompson, Cambridge University, England, September 2002.

59) Invited speaker, International Conference in Number Theory in honor of Jean-Louis Nicolas, Marseille-Luminy, France, January 2002.

58) Invited speaker, First Joint Conference of the American and French Mathematical Societies, Lyon, France, July 2001.

57) Invited speaker (one hour), Japan-China Number Theory Conference, Iizuka, Japan, March 2001.

56) Invited speaker, Ramunujan Millenium Conference, Panjab University, Chandigarh, India, September 2000.

55) Invited speaker, Conference on Number Theory in honor of K. Gyory and A. Sarkozy, Debrecen, Hungary, July 2000.

54) Invited speaker, Millenial Number Theory Conference, University of Illinois, Urbana, May 2000.

53) Invited speaker (one hour), Illinois Number Theory Conference, Urbana, September 1999.

52) Invited speaker, Conference in memory of Paul Erdös, Hungarian Academy of Sciences, Budapest, July 1999.

51) Invited speaker (one hour), Conference in honor of George Andrews, Penn. State University, October 1998.

50)Invited opening speaker, International Conference on Number Theory, Bangalore, India, Dec. 2003.

49) Invited Speaker (one hour), International Conference on Point Processes, Madras, India, August 2003.

48) One hour speaker, International Conference on Topology, Zeta Functions and Quantum Physics, University of Kinki, Osaka, Japan, March, 2003.

47) Invited to give Weissman Public Lecture of the City University of New York, November 2002.

46) Invited speaker, International Conference on Group Theory in honor of John G. Thompson, Cambridge University, England, September 2002.

45) Invited speaker, International Conference in Number Theory in honor of Jean-Louis Nicolas, Marseille-Luminy, France, January 2002.

44) Invited speaker, First Joint Conference of the American and French Mathematical Societies, Lyon, France, July 2001.

43) Invited speaker (one hour), Japan-China Number Theory Conference, Iizuka, Japan, March 2001.

42) Invited speaker, Ramunujan Millenium Conference, Panjab University, Chandigarh, India, September 2000.

41) Invited speaker, Conference on Number Theory in honor of K. Gyory and A. Sarkozy, Debrecen, Hungary, July 2000.

40) Invited speaker, Millenial Number Theory Conference, University of Illinois, Urbana, May 2000.

39) Invited speaker (one hour), Illinois Number Theory Conference, Urbana, September 1999.

38) Invited speaker, Conference in memory of Paul Erdös, Hungarian Academy of Sciences, Budapest, July 1999.

37) Invited speaker (one hour), Conference in honor of George Andrews, Penn. State University, October 1998.

36) Invited opening speaker, International Conference on Number Theory, Bangalore, India, Dec. 2003.

35) Invited Speaker (one hour), International Conference on Point Processes, Madras, India, August 2003.

34) One gour speaker, International Conference on Topology, Zeta Functions and Quantum Physics, University of Kinki, Osaka, Japan, March, 2003.

33) Weissman Public Lecture of the City University of New York, November 2002.

32) Invited speaker, International Conference on Group Theory in honor of John G. Thompson, Cambridge University, England, September 2002.

31) Invited speaker, International Conference in Number Theory in honor of Jean-Louis Nicolas, Marseille-Luminy, France, January 2002.

30) Invited speaker, First Joint Conference of the American and French Mathematical Societies, Lyon, France, July 2001.

29) One hour lecture, Japan-China Number Theory Conference, Iizuka, Japan, March 2001.

28) Invited speaker, Ramunujan Millenium Conference, Panjab University, Chandigarh, India, September 2000.

27) Invited speaker, Conference on Number Theory in honor of K. Gyory and A. Sarkozy, Debrecen, Hungary, July 2000.

26) Invited speaker, Millenial Number Theory Conference, University of Illinois, Urbana, May 2000.

25) Invited address (one hour), Illinois Number Theory Conference, Urbana, September 1999.

24) Invited speaker, Conference in memory of Paul Erdös, Hungarian Academy of Sciences, Budapest, July 1999.

23) One hour lecture, Conference in honor of George Andrews, Penn. State University, October 1998.

22) Invited speaker, Seminaire Lotharingien de Combinatoire in honor of George Andrews at Maratea, Italy, September 1998.

21) Invited speaker, American Mathematical Society Conference in honor of Richard Askey at Mt. Holyoke, June 1998.

20) One hour address, Japan Number Theory Conference, Research Institute of Mathematical Sciences (RIMS), Kyoto, November 1997.

19) Invited talk (45 minutes), International Congress on Algebra and Combinatorics, Hong Kong, August 1997.

18) Invited Speaker, Special Session on Paul Erdös, Mathematical Association of America Mathfest, Atlanta, August 1997.

17) Invited speaker, Conf on Number Theory, Penn. State University, August 1997.

16) Invited Speaker, DIMACS Conference on Combinatorial Number Theory, Rutgers University, February 1996.

15) Invited Speaker, Tenth Anniversary Conference of The Ramanujan Mathematical Society, Tiruchirapalli, India, January 1996.

14) Invited Speaker, International Symposium on Number Theory, Anna University, Madras, India, January 1996.

13) Invited Address (one hour), Conference on Special Functions, q-Series and Related Topics, Fields Institute, Toronto, Canada, June 1995.

12) Invited speaker, International Conference on Number Theory in honor of Heini Halberstam, University of Illinois at Urbana, May 1995.

11) Invited Speaker, Conference on Enumeratice Combinatorics and the Symmetric Group, Mathematisches Forschungsinstitut, Oberwolfach, Germany, January 1995

9) Srinivasa Ramanujan Endowment Lecture, Anna University, Madras, India, December 1990. ss 10) Invited talk (half hour) Illinois Number Theory Conference, University of Illinois at Urbana, April 1992.

8) Invited address (one hour), First Coast Regional Meeting of the Mathematical Association of America, Jacksonville, Florida, October 1990.

7) Invited speaker, Second Conference of the Canadian Number Theory Association, University of British Columbia, Vancouver, Canada, August 1989.

6) Invited speaker, International Conference on Number Theory in honor of Paul Bateman, University of Illinois, Urbana, April 1989.

5) Invited address (one hour), Suncoast Regional Meeting of the Mathematical Association of America, St. Petersburg, Florida, December 1988.

4) Invited Speaker, Conference on Analytioc Number Theory, Mathematisches Forschungsinstitut, Oberwolfach, Germany, Oct 1988

3) In-state invited address (one hour), Florida Section Meeting of the Mathematical Association of America, Winter Park, Florida, March 1988.

2) Invited address (one hour), International Conference for Srinivasa Ramanujan's Centennial, Anna University, Madras, India, December 1987.

1) Invited talk (one hour) at the conference, "Ramanujan and Science in the Third World," Framingham State University, Massachusetts, October 1987.

Invited Speaker at special sessions on Number Theory at American Mathematical Society Conferences: Ann Arbor (1980), Knoxville (1980), Notre Dame (1981), Denver (1983), Norman (1983), Anaheim,JMM (1985), DeKalb (1993), Vancouver (1993), Minnesota (1994), Greensboro (1995), Philadelphia (1998), Penn. State (1998, 2009), Gainesville (1999), San Francisco (2003, 2006), Urbana (2009), Tucson (2012), San Diego (2013), Lubbock (2014), San Antonio JMM (2015), Rutgers (2015), Atlanta JMM (2017), Gainesville, FL (2019).

SOME INVITED CONFERENCE TALKS PRIOR TO JOINING UF IN 1986:

Conferences organized by Mathematics Institute, Oberwolfach, Germany: Diophantine Approximations (May 1979), Analytic Number Theory (Oct 1986).

NSF supported workshops: Ann Arbor (1973), Austin (1982) and Stillwater (1984).

RESEARCH PUBLICATIONS:

PAPERS COMPLETED IN 2024 AND IN PREPARATION:

83. (with Yazan Alamoudi), *On sifted sums involving the Moebius function and the number of prime factors* (in preparation).

82. (with Sroyon Sengupta), *Higher order duality between prime factors and the Prime Number Theorem for Arithmetic Progressions* (in preparation).

81. (with Yazan Alamoudi), *Some q-hypergeometric identities associated with the partition theorems of Lebesgue, Schur and Capparelli* (completed Dec 2024, submitted in Jan 2025), 28 page preprint.

PEER REVIEWED PAPERS SINCE JANUARY 2020:

80. (with Jason Johnson), *Duality between prime factors and the prime number theorem for arithmetic progressions - II* (submitted for publication Oct 2024; see also - arXiv:2410.18259 [math.NT]).

79. (with Ankush Goswami), *On the parity of the generalized divisor function with restrictions on the prime factors*, Fields Institute Communications (accepted in 2022, to appear - see letter attch'd, p. 23 (arXiv:2412.03088 [math. NT])).

78. *Schmidt-type theorems via weighted partition identities*, Ramanujan J (Askey Memorial Vol.) **61** (2023), 701-714.

77. *Euler's partition theorem and refinements without appeal to infinite products*, in Algebraic Combinatorics: Enumerative Combinatorics, Special Functions, and Computer Algebra. Texts & Monographs in Symbolic Computation, Springer, Cham, Switzerland (2020), 9-23.

76. (with Todd Molnar), *The local distribution of the number of small prime factors: variation of the classical theme,*, Ramanujan J. **51** (2020), 117-151..

75. *Ramanujan's Legacy - The Work of the SASTRA Prize Winners,*, Phil. Trans. Royal Soc. London - A **378** (2020), 1-19.

PAPERS PRIOR TO JANUARY 2020:

74. (with Colin Defant), *Revisting the Riemann zeta function at postive even integers*, Int'l J. Number Theory **14** (2018), 1849-1856.

73. *A multi-dimensional extension of Sylvester's identity*, Int'l J. Number Theory **13** (2017), 2487-2504.

72. *Partitions with non-repeating odd parts and combinatorial identities*, Annals of Combinatorics **20** (2016), 1-20.

71. (with George Andrews), *The dual of Göllnitz' (big) partition theorem*, Ramanujan J. (Basil Gordon memorial volume) **36** (2015), 171-201.

70. *Partial theta identities of Ramanujan, Andrews, and Rogers-Fine involving the squares,*, in The Legacy of Srinivasa Ramanujan, (B.C. Berndt and D. Prasad, Eds.), Ramanujan Math. Soc. Lecture Notes **20** (2103), 29-53.

69. *Variants of q-hypergeometric identities and partition implications*, Ramanujan J. (Special issues in honor of Mourad Ismail and Dennis Stanton) **31** (2013), 213-238.

68. *Analysis of a generalized Lebesgue identity in Ramanujan's Lost Notebook*, Ramanujan J. (Ramanujan 125-th birthday volume) **29** (2012), 339-358.

67. *Combinatorial analysis and comparison of partial theta identities of Andrews and Ramanujan*, Ramanujan J. **23** (2010), 227-241.

66. *Partitions with non-repeating odd parts and q-hypergeometric identities*, in The legacy of Alladi Ramakrishnan in the mathematical sciences (K. Alladi, J. R. Klauder, C. R. Rao, Eds.), **Springer** (2010), 169-182.

65. *A partial theta identity of Ramanujan and its number theoretic interpretation*, Ramanujan J. **20** (2009), 329-339.

64. *A new combinatorial study of the Rogers-Fine identity and a related partial theta series*, Int'l. J. Num. Th. **5** (2009), 1311-1320.

63. (with A. Berkovich), *Series and polynomial representations for weighted Rogers-Ramanujan partitions and products modulo 6*, Adv. Studies in Pure Math. **43** (2007), 1-18.

62. (with George Andrews, Ken Ono, and Richard McIntosh), *On the work of Basil Gordon*, Journal of Combinatorial Theory, Ser A **113** (2006), 21-38.

61. (with A. Berkovich), *Göllnitz-Gordon partitions with weights and parity conditions*, in Zeta Functions, Topology, and Quantum Physics (T. Aoki and S. Kanemitsu, Eds), Developments in Math., Springer **14** (2005), 1-18.

60. (with A. Berkovich), *A limiting form of the q-Dixon ${}_4\phi_3$ summation and related partition identities*, in Refinements of Number Theoretic Methods (C.Jia and S. Kanemitsu, Eds), Developments in Math, **8** (2003), 1-14.

59. (with A. Berkovich), *New polynomial analogues of Jacobi's triple product and Lebesque identities*, Advances in Applied Math., **32** (2004), 801-824.

58. (with G.E. Andrews and A. Berkovich), *A new four parameter q-series identity and its partition implications*, Inventiones Mathematicae **153** (2003), 231-260.

57. (with G.E. Andrews and A. Berkovich), *A four parameter generalization of Göllnitz's (big) partition theorem*, in Proc. DIMACS conference on Unusual Applications of Number Theory, DIMACS series in Discrete Math. and Theoretical Computer Sci., **64** (2004), 1-7.

56. (with A. Berkovich), *New weighted Rogers-Ramanujan partition theorems and their implications*, Transactions Amer. Math. Soc. **354** (2002), 2557-2577.

55. (with A. Berkovich), *A double bounded version of Schur's partition theorem*, Combinatorica, Erdös Memorial Volume **22** (2002), 151-168.

54. (with A. Berkovich), *A double bounded key identity for a partition theorem of Göllnitz*, in Symbolic Computation, Number Theory, Special Functions, Physics, and Combinatorics (Frank Garvan and Mourad Ismail Eds.), Developments in Math., Kluwer Acad. Publ., Dordrecht **5** (2001), 13-32.

53. *"Going beyond the Big Theorem of Göllnitz- a breakthrough in the theory of partitions and q-series"*, Math. Assoc. of America-Focus **20** (2000), 8-9.

52. (with R. Solomon and A. Turull), *Finite simple groups of bounded subgroup chain length*, Journal of Algebra **231** (2000), 374-386.

51. *Reformulations of a partition theorem of Göllnitz and q-series identities,* in q-Series from a Comtemporary Perspective, Contemp. Math, **254** (2002), 31-44.

50. *A fundamental but unexploited partition invariant*, in Number Theory and its Applications (S, Kanemitsu, and K.Gyory, Eds.), Proceedings 1997 Kyoto Conference on Number Theory, Developments in Math. Kluwer **2** (1999), 19-23.

49. *A fundamental invariant in the theory of partitions*, in Topics in Number Theory,(Ahlgren, George Andrews, Ken Ono, Eds.), Proc. 1997 Conf. at Penn. State Univ., Mathematics and its Applications, Kluwer **113,** (1999), 101-113.

48. *A variation on a theme of Sylvester-a smoother road to Göllnitz' (Big) theorem*, Discrete Math. **196** (1999), 1-11.

47. (with George E. Andrews), *A quartic key identity for a partition theorem of Göllnitz*, Journal of Number Theory **75** (1999), 220-236.

46. *On a partition theorem of Göllnitz and quartic transformations*, (with an appendix by Basil Gordon), Journal of Number Theory, **69** (1998), 153-180.

45. *Partition identities involving gaps and weights-II*, The Ramanujan Journal **2** (1998), 21-38.

44. *Refinements of Rogers-Ramanujan type identities*, in Proceedings of the Fields Institute Conference on special functions, q-series and related topics, Fields Institute Communications **147** (1997), 1-35.

43. *Weighted partition identities and applications*, in Proceedings of the Halberstam Conference, Progress in Mathematics, Birkhauser **138** (1996), 1-15.

42. (with George E. Andrews), *A new key identity for Göllnitz' (Big) partition theorem*, Contemp. Math., **210** (1997), 229-241.

41. *A combinatorial correspondence related to Göllnitz' (Big) partition theorem and applications*, Transactions Amer. Math. Soc. **349** (1997), 2721-2735.

40. *Partition identities involving gaps and weights*, Transactions Amer. Math. Soc., **349** (1997), 5001-5019.

39. *The method of weighted words and applications to partitions*, in Proc. 1992-93 Seminaire de Theorie des Nombres, Paris, London Math. Soc. Lecture Note Ser., **215** (1995), 1-36.

38. (with George E. Andrews and Basil Gordon), *Refinements and generalizations of Capparelli's conjecture on partitions*, Journal of Algebra, **174** (1995), 636-658.

37. (with Basil Gordon), *Schur's partition theorem, companions, refinements and generalizations*, Transactions Amer. Math. Soc., **347** (1995), 1591-1608.

36. *The Quintuple Product Identity and Shifted Partition Functions*, J. Computational and Applied Math., *Special issue on q-series*, **68** (1996), 3-13.

35. *Some new observations on the Göllnitz-Gordon and Rogers-Ramanujan identities*, Transactions Amer. Math. Soc., **347** (1995), 897-914..

34. (with George E. Andrews and Basil Gordon), *Generalizations and refinements of partition theorems of Göllnitz*, J. Reine Angew. Math., **460** (1995), 165-188.

33. (with Basil Gordon), *Vanishing coefficients in the expansion of products of Rogers-Ramanujan type*, Contemp Math. **166** (1994), 129-139.

32. *On the modified convergence of continued fractions of Rogers-Ramanujan type*, Journal of Combinatorial Theory Theory **Ser. A, 66** (1994), 214-245.

31. (with Basil Gordon), *Generalizations of Schur's partition theorem*, Manuscripta Mathematica **79** (1993), 113-126.

30. (with Basil Gordon), *Partition identities and a continued fraction of Ramanujan*, Journal of Combinatorial Theory **Ser.A 63** (1993), 275-300.

29. *The distribution of additive functions in special sets of integers,*, Springer-Lecture Notes **1395** (1989), 21-63.

28. *Multiplicative functions and Brun's Sieve*, Acta Arithmetica **51** (1988), 201-219.

27. *Probabilistic Number Theory and Brun's sieve* Proc. 1986-87 Seminaire de Theorie des Nombres, Paris, Progress in Math., Birkhauser **75** (1988), 1-26.

26. (with P. Erdös and J.D. Vaaler), *Multiplicative functions and small divisors-II*, J. Number Theory **31** (1989), 183-190.

25. *Moments of additive functions and special sets*, Proc. 1986-87 Seminar on Number Theory, Universite de Bordeaux **No. 1**, 1-13.

24. *An Erdös-Kac Theorem for integers without large prime factors*, Acta Arithmetica, Erdös 75th birthday issue **49** (1987), 81-105.

23. (with P. Erdös and J.D. Vaaler), *Multiplicative functions and small divisors*, Analytic Number Theory and Diophantine Problems, Birkhauser Progress in Math. **70** (1987), 1-13.

22. *Moments of additive functions and the sequence of shifted primes*, Pacific J. Math **118** (1985, Straus memorial issue), 261-275.

21. *A new application of the Sieve to Probabilistic Number Theory*, Topics in Analytic Number Theory, , Univ. Texas Press (1985), 1-27.

20. *Moments of additive functions and sieve methods*, New York Number Theory Seminar, Springer Lecture Notes **1052** (1984), 1-25.

19. *A study of the moments of additive functions using Laplace transforms and sieve methods*, Springer Lecture Notes **1122** (1985), 1-37.

18. *The Turan-Kubilius inequality for integers without large prime factors*, J. Reine Angew. Math. **335** (1982), 180-196.

17. *Additive functions and special sets of integers*, Springer Lecture Notes **958** (1982), 1-50.

16. *Distribution of $\nu(n)$ in sieve of Eratosthenes*, Quart. J. Math., Oxford **33** (1982), 129-148.

15. *The Moebius function and integers with restricted prime factors*, Matscience Report No. 101, Publications of Matscience, Institute for Mathematical Sciences, Madras, India (1980).

14. *Asymptotic estimates of sums involving the Moebius function, II*, Trans. Amer. Math. Soc. **272** (1982), 87-105.

13. *Asymptotic estimates of sums involving the Moebius function*, J. Number Theory **14** (1982), 86-98.

12. *On the probability that n and $\Omega(n)$ are relatively prime*, Fibonacci Quart. **19** (1981), 228-233.

11. (with M.L. Robinson), *Legendre polynomials and irrationality*, J. Reine Angew. Math **318** (1980), 137-155.

10. *Legendre polynomials and irrational numbers*, Matscience Report 100, Publications of Matscience, Institute for Mathematical Sciences, Madras, India (1979).

9. (with M.L. Robinson), *On certain irrational values of the logarithm*, Springer Lecture Notes **751** (1979), 1-10.

8. (with P. Erdös), *Asymptotic behavior of large prime factors of integers*, Pacific J. Math **82** (1979), 295-315.

7. (with P. Erdös and V.E. Hoggatt, Jr.), *On additive partitions of integers*, Discrete Math **22** (1978), 201-211.

6. (with C. Grinstead), *On the decomposition of n! into prime powers*, J.Number Theory **9** (1977), 452-458.

5. *Duality between prime factors and an application to the prime number theorem for arithmetic progressions*, J. Number Theory **9** (1977), 436-451.

4. *Analogues to the Hardy-Ramanujan theorems*, Proceedings of the Conference on Numerical Analysis and Number Theory, Publications of Matscience, Madras, India (1977).

3. (with P. Erdös), *On an additive arithmetic function*, Pacific J. Math **71, No. 2** (1977), 275-294.

2. *On arithmetic functions and divisors of higher order*, J. Austral. Math. Soc. **23 Ser. A., Part I** (1977), 9-27.

1. *Sets generated by arithmetic sequences*, Proc. Indian Acad. Sci. **81 Ser A.** (1975), 245-251.

Solo papers of my PhD students based on my work
2) (by Yazan Alamoudi) *A bijective proof of Andrews' refinement of the Alladi-Schur theorem*, submitted Dec 2024 (see also arXiv:2410.15630[math.NT]).

1) (by Sroyon Sengupta) *Algebraic analogues of the results of Alladi-Johnson using the Chebotarev density theorem*, submitted Nov 2024
(see also arXiv:2410.22226[math.NT]).

Citations of my research during 2020-24

Several citations for my 1977 joint work with Paul Erdös, *Alladi Duality*, *Alladi's formula*, *Alladi-Schur Theorem*, and the *Alladi-Schur polynomials*, some in titles of papers such as in the following journals:
J. Combinatorial Theory, A, **189** (2022), 105614
Finite Fields and their Applications, **74** (2021)
J. Number Theory, **221** (2021), p.232.

CITATION OF MY RESEARCH FOR MY 2022 HONORARY DOCTORATE:

Professor Krishnaswami Alladi is a major international figure with extensive contributions in diverse areas of number theory. As a teenager, his mathematical talent was recognized by Paul Erdös, one of the great mathematicians of the twentieth century. Professor Alladi's subsequent work with Erdös on the sum of the prime factors of integers is now widely known and cited. "Alladi Duality", introduced in Alladi's award winning PhD thesis, is currently being investigated in algebraic number theory. In analytic number theory, he introduced a new approach to probabilistic number theory using a multiplicative generalization of the sieve method. Switching from multiplicative to additive number theory, his work in the theory of partitions has been equally impactful. He developed jointly with the celebrated mathematician Professor Basil Gordon, the "method of weighted words". This beautiful combinatorial method has been applied extensively to major partition problems. In particular, it led to a natural extension of a deep theorem of Göllnitz, a task which has been attempted by mathematicians for decades. More recently, he has developed the "theory of weighted partition identities" which has been remarkably effective in the study of Schmidt-type theorems. The success of his work relies not only in his brilliant insights, but also in his great ability to explain his ideas and methods elegantly and eloquently.
SASTRA is proud to award Professor Krishnaswami Alladi the degree of Doctor of Science in recognition of his far-reaching and outstanding contributions in the field of mathematics in general, and Number Theory - Analytic Number Theory, Sieve Methods, Probabilistic Number Theory, Diophantine Approximations, and Partitions and q-Hypergeometric Series - in particular.

BOOKS PUBLISHED

3) (MY ACADEMIC AUTOBIOGRAPHY) *My Mathematical Universe - People, Personalities, and the Profession*, **World Scientific, Singapore** (2022), 746 pages. ISBN: 978-981-120-287-2. (https://doi.org/10.1142/13046)

2) *Ramanujan's place in the world of mathematics* - Expanded Second Edition, **Springer India**, New Delhi (2021), 265 pp. ISBN: 978-981-15-6240-2

1) *Ramanujan's place in the world of mathematics*, **Springer India**, New Delhi (2012), 177 pp. ISBN: 978-8132207665

BOOK IN PROGRESS:

1) PROPOSED TITLE: *Irrational and transcendental numbers and Diophantine Approximation* (Expected to be about 300 pages. I have typed 155 pages; rest are currently in handwritten form.)

BOOKS AND JOURNAL VOLUMES EDITED

17) *Freeman Dyson - The Man and his Mathematics*, (K. Alladi, G. E. Andrews, and A. Sills, Eds.), **World Scientific Publishing Company**, Singapore (contract signed in 2023).

16) *Srinivasa Ramanujan - his Life, Legacy, and Mathematical Influence* (K. Alladi, G. E. Andrews, B. C. Berndt, F. Garvan, K, Ono, P. Paule, O. Waarnaar, A. J. Yee, Eds), **Springer**, New York (in printing, first proofs rec'd in 2024), 1100 pages. *This book has 240 articles by nearly a hundred authors. I proposed this volume. I have contributed 23 articles to this volume.*

15) *George Andrews: 80 Years of Combinatory Analysis* (K. Alladi, B. C. Berndt, P. Paule, J. A. Sellers, and A. J. Yee, Eds.), **Trends in Mathematics, Birkhauser**, Basel (2021).

14) *Marvin Knopp Memorial Volume* (K. Alladi, B. C. Berndt, Y. Choi, W. Pribitkin, Eds.) **The Ramanujan Journal**, Vol. 41 (2016), 562 pages

13) *Ramanujan 125* (K. Alladi, F. Garvan, and A. J. Yee, Eds.), Proceedings of the Ramanujan 125 Conference held in Gainesville in Nov. 2012, **Contemporary Math. 627, AMS**, (2014).

12) *Quadratic and higher degree forms*, A selection of papers presented the twin 2009 conferences on quadratic and higher degree forms in Gainesville and at the 2009 Arizona Winter School on quadratic forms (K. Alladi, M. Bhargava, D. Savitt and P. H. Tiep, Eds.), **Developments in Math., Springer, Vol. 31** (2013).

11) *Srinivasa Ramanujan 125* (K. Alladi, G. E. Andrews, and J. M. Borwein, Eds.), A collection of research papers for the 125-th birth anniversary of Srinivasa Ramanujan, **The Ramanujan Journal, Vol 29, Springer, New York** (2012), 445 pages

10) *Partitions, q-series, and modular forms* (K. Alladi and F. Garvan, Eds.), Proc. 2008 Gainesville Conference, **Developments in Math., Vol 23, (2011) Springer, New York** 224 pages.

9) *Combinatory Analysis* (K. Alladi, P. Paule, J. Sellers, A. J. Yee, Eds.), A selection of research papers in combinatory analysis dedicated to George Andrews for his 70-th birthday, **The Ramanujan Journal, Vol 23, Springer, New York** (2010), 430 pages.

8) *The legacy of Alladi Ramakrishnan in the mathematical sciences* (K. Alladi, J. R. Klauder, C. R. Rao, Eds.), A selection of research and survey papers in pure mathematics, probability, statistics, applied mathematics, and theoretical physics in memory of Alladi Ramakrishnan, **Springer, New York** (2010), 575 pages.

7) *The SASTRA Ramanujan Lectures* (K. Alladi, Ed.), A selection of research papers and surveys as outgrowths of hour lectures given at the annual SASTRA Number Theory Conferences, **The Ramanujan Journal, Vol 20, Springer, New York** (2009), 187 pages.

6) *Surveys in Number Theory* (K. Alladi, Ed.), A selection of featured expositions of the 2004-05 Special Year in Number Theory at UF, **Developments in Mathematics, Vol 17, Springer, New York** (2008), 188 pages.

5) *Jean-Louis Nicolas and Number Theory* (K. Alladi, C. Mauduit, C. Pomerance, A. Sarkozy, and G. Tenenbaum, Eds.), A selection of research papers from the 2002 Conference in honor of Prof. Nicolas in Marseille, **The Ramanujan Journal, Vol 9, Springer New York** (2005), 264 pages.

4) *Analytic and Elementary Number Theory - a tribute to mathematical legend Paul Erdös*(K. Alladi, P. D. T. A. Elliott, A. Granville, and G. Tenenbaum, Eds.), **Developments in Mathematics, Vol. 1, Kluwer Academic Publishers** (1998), 298 pages.

3) *Number Theory*, Proceedings - 1987 Ramanujan Centenary Conference, Madras, India, **Lecture Notes in Mathematics, Vol. 1395, Springer-Verlag**, (1989), 234 pages.

2) *Number Theory*, Proceedings - Fourth Matscience Number Theory Conference, Ootacamund, India, **Lecture Notes in Mathematics, Vol. 1122, Springer-Verlag**, (1985), 217 pages.

1) *Number Theory*, Proceedings - Third Matscience Number Theory Conference, Mysore, India, **Lecture Notes in Mathematics, Vol. 958, Springer-Verlag** (1982), 175 pages.

ARTICLES OF GENERAL INTEREST

For the benefit of the general public, I have contributed several articles to "The Hindu", India's National Newspaper, on Ramanujan and other mathematical luminaries whose work is connected to that of Ramanujan. I also have been invited to write articles about leading mathematiciens of our generation either as memorial tributes or as tributes for their milestone birthdays.

25. *Askey and Ramanujan in "The Legacy of Dick Askey (1933-2019)"*, Notices of the Amer. Math. Soc. **69** (2022), 63-64.

24. *Remembering Freeman Dyson in "In Memorium: Freeman Dyson (1923-2020)"*, Notices Amer. Math. Soc. **68** (2021), 1145-1147.

(Reprinted in IAMP News Bulletin, International Association of Mathematical Physics, October 2021.)

23. *"Reflections on Shreeram Abhyankar"*, in Lattice Paths, Combinatorics and Applications (George E. Andrews, Alan Krinik, and Christian Krattenthaler, Eds.), Developments in Math., Springer, New York **58** (2019), 43-46.

22. *"My association and collaboration with George Andrews - torchbearer of Ramanujan and partitions"*, in Lattice Paths, Combinatorics and Applications

(George E. Andrews, Alan Krinik, and Christian Krattenthaler, Eds.), Developments in Math., Springer, New York **58** (2019), 47-70.

21. *"Major progress in prime number theory"*, The Hindu, Dec 25, 2006.
20. *"Solution of a problem of Ramanujan on quadratic forms"*, The Hindu, Dec 23, 2005.
19. *"Issai Schur - Ramanujan's German contemporary"*, The Hindu, Dec 22, 2005.
18. *"Niels Henrik Abel - Norwegian mathematical genius"*, The Hindu, Dec. 2004.
17. *"Ramanujan's growing influence"*, The Hindu, Dec. 2003.
16. *"J.E. Littlewood-Hardy's collaborator and Ramanujan's contemporary"*, The Hindu, Dec. 2003.
15. *"Partitions- a play on Ramanujan"*, The Hindu, May 2003.
14. *"G.H. Hardy- Ramanujan's mentor"*, The Hindu, Jan. 2003.
13. *"Leonhard Euler- most prolific mathematician in history"*, The Hindu, Dec. 2001.
12. *"Evariste Galois- founder of group theory"*, The Hindu, Dec. 2000.
11. *"Ramanujan and partitions"*, The Hindu, Dec. 1999.
10. *"C.G.J. Jacobi- algorist par-excellence"*, The Hindu, Dec. 1997.
9. *"The Ramanujan Journal- its conception, need, and place"*, The Hindu, Jan. 17, 1997.
8. *"Erdös and Ramanujan- legends of twentieth century mathematics"*, The Hindu, Dec. 1996.
7. *"J.J. Sylvester- Ramanujan's illustrious predecessor"*, The Hindu, Dec. 1995.
6. *"Fermat and Ramanujan- a comparison"*, The Hindu, Jan. 1995.
5. *"Ramanujan and pi"*, The Hindu, Dec. 1994.
4. *"P.A. MacMahon- Ramanujan's distinguished contemporary"*, The Hindu, Dec. 1993.
3. *"L.J. Rogers- a contemporary of Ramanujan"*, The Hindu, Dec. 1992.
2. *"Ramanujan- the second century"*, The Hindu, Dec.22, 1991.
1. *"Ramanujan-an estimation"*, The Hindu, Dec.22, 1987, Ramanujan Centennial.

Other publications related to Ramanujan:

11) *The SASTRA Ramanujan Prize - its origins and its winners* Notices AMS, **66** (2019), 64-72. (Original slightly enhanced version of this article appeared in July 2019 in The Asia Pacific Mathematics Newsletter, **8** (2018), 24-37.)

10) *Ramanujan in Mauritius*, Asia Pacific Mathematics Newsletter, **7** (2017), 16-20.

9) *Maryna Viazovska to receive 2017 SASTRA Ramanujan Prize*, Newsletter of the European Math. Soc., **106** (2017), 10-11.

8) *A review of the movie The Man Who Knew Infinity*, Asia Pacific Mathematics Newsletter, **6** (2016), 29-41.

7) *Touched by the Goddess*, A review of the movie - The Man Who Knew Infinity", Inference - an Int'l Review of Science, **4** (2016), 13 pages

6) *The 2014 SASTRA Ramanujan Prize to James Maynard*, Newsletter of the European Math. Soc., **90** (2014), 10-11

5) *Manjul Bhargava's Fields Medal and beyond*, Asia Pacific Newsletter, **4** (2014), 17-20 (Published by World Scientific)

4) *Homage to Srinivasa Ramanujan on his 125-th birth anniversary*, Newsletter of the European Math. Soc., **88** (2013), 34-38.

3) *Ramanujan's thriving legacy*, Notices Amer. Math. Soc., **59** (2012), 1522-1528.

2) *The first SASTRA Ramanujan prizes*, Math. Assoc. of America-Focus, **26** (2006), p7

1) *A pilgrimage to Ramanujan's hometown*, Math. Assoc. of America-Focus, **26** (2006), 4-6.

Special publication for Ramanujan's 125-th birth anniversary:

The 125-th birth anniversary of the Indian mathematical genius Srinivasa Ramanujan was on December 22, 2012. In connection with that I had the following special publications in 2012-13:

FEATURE ARTICLE: At the invitation of the AMS, I edited a feature article: *Srinivasa Ramanujan - going strong at 125*, Notices Amer. Math. Soc., Part I -**59** (2012), 1522-1537; Part II - **60** (2013), 10-22, This feature has contributions by eight mathematicians.

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December 26, 2024

Dear Professor Krishnaswami Alladi,

This is with regard to your paper with Ankush Goswami titled "Parity results concerning the generalized divisor function involving small prime factors of integers", which is to appear in the *Fields Institute Communications*, titled *"Some contributions to number theory and beyond"*. As an editor of the refereed volume, I am writing to let you know that the volume is now in production, and we will send you the page proofs for corrections/approval closer to the publication date, which we expect to be in 2025.

Thanking you,
Sincerely,

Kaneenika Sinha