

# VITA FOR MICHAEL FILASETA

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**Email:** [filaseta@mailbox.sc.edu](mailto:filaseta@mailbox.sc.edu)**URL:** <http://www.math.sc.edu/~filaseta/>**Phone:** (803) 777-4224 (Department)**Education:**

Ph.D. University of Illinois at Champaign-Urbana (1984)

B.A. University of Arizona (1980)

**Professional Experience:**

Assistant Chair, Mathematics Department, University of South Carolina (2012-present)

Full Professor, University of South Carolina (1995-present)

Associate Professor, University of South Carolina (1989-1995)

Assistant Professor, University of South Carolina (1984-1989)

Teaching and Research Assistant, University of Illinois (1980-83)

**Grants:**

Duration	Agency	Type	Title
2012-2014	NSA	PI	<i>Polynomial Problems in Analytic Number Theory</i>
2004-2007	NSA	PI	<i>Fac lac plyns &amp; Galois grps of Laguerre plyns (with Douglas Meade)</i>
2002-2006	NSF	PI	<i>On the factorization of lacunary polynomials (with Douglas Meade)</i>
2000-2003	NSF	Co-PI	<i>SCREMS Proposal</i>
1998-2000	NSA	PI	<i>Problems on the irreducibility of polynomials</i>
1997-1999	NSA	PI	<i>Finite differences &amp; irreduc. techniques in Analytic Number Theory</i>
1994-1997	NSF	PI	<i>Finite diff. techniques &amp; irreducibility thms in Analytic Num. Theory</i>
1994-1996	NSF	Co-PI	<i>Computational equip. for Algebra, Combin., and Number Theory</i>
1992-1994	NSA	PI	<i>Problems related to finite differences, fract. parts, and irreducibility</i>
1989-1991	NSF	PI	<i>Gaps between <math>k</math>-free numbers, finite differences, &amp; exponential sums</i>

**Other Awards:**

Mungo Graduate Teaching Award, 2010

USC Promising Investigator Research Award, 2010

Mortar Board Excellence in Teaching Award, 1994

The Distinguished Award of the Hardy-Ramanujan Society (with Ognian Trifonov), 1991

USC Research and Productive Scholarship Grant (Univ. of S. Carolina, 1985-1986)

University Fellowship (University of Illinois, 1980-1982)

**Memberships:** American Mathematical Society (AMS), Mathematical Assoc. of America (MAA)

**Former Doctoral Students:**

Year	Name	Dissertation Title
2012	Samuel Gross	<i>Irreducibility criteria for polynomials with non-negative integer coefficients, and the prime factorization of <math>f(n)</math> for <math>f(x)</math> in <math>\mathbb{Z}[x]</math></i>
2012	Andrew Vincent	<i>Classifying polynomials with reducible nonreciprocal parts and the factorization of values of polynomials</i>
2010	Pradipto Banerjee	<i>On a conjecture of Pál Turán and investigations into Galois groups of generalized Laguerre polynomials</i>
2009	Dan Baczowski	<i>Diophantine equations involving factorials and lattice points close to smooth curves</i>
2007	Mark Kozek	<i>Applications of Covering Systems of Integers and Goldbach's Conjecture for Monic Polynomials</i>
2006	Carrie Finch	<i>Topics from the irreducibility of polynomials and coverings of the integers</i>
2004	Travis Kidd	<i>On the irreducibility of the Laguerre polynomials <math>L_m^{(m)}(x)</math></i>
2001	Martha Allen	<i>Generalizations of the irreducibility theorems of I. Schur</i>
2001	Angel Kumchev	<i>Diophantine problems involving prime numbers</i>
2000	Richard L. Williams	<i>The irreducibility of a certain class of Laguerre polynomials</i>
1996	Ikhalfani Solan	<i>Norms of factors of polynomials, an extension of a theorem of Ljunggren, and the distribution of <math>k</math>-free numbers</i>
1995	Brian D. Beasley	<i>The distribution of powerfree values of irreducible polynomials</i>

**Former Masters Students:**

Year	Name	Thesis Title
2013	Morgan Cole	<i>Sharp bounds associated with an irreducibility theorem for polynomials having non-negative coefficients</i>
2013	Daniel White	<i>Coloring Pythagorean triples and a problem concerning cyclotomic polynomials</i>
2011	Paul Hendrick	<i>A bound for the irrationality measure of <math>\zeta(3)</math></i>
2007	J Russell Leidy	<i>Galois groups of Laguerre polynomials</i>
2004	Manton Matthews	<i>On the factorization of <math>f(x)x^n + g(x)</math></i>
2003	Robert Murhpy	<i>Factorization of polynomials with small Euclidean norm</i>
2001	Michael Williams	<i>Eisenstein's criterion applied to <math>m</math>th order Bernoulli polynomials of degree <math>m</math></i>
1999	Martha Allen	<i>The irreducibility theorems of I. Schur</i>

**Former Masters Students (Continued):**

Year	Name	Thesis Title
1998	James Blair	<i>Determining the irreducibility of polynomials through the use of Newton polygons</i>
1997	Brian Hipp	<i>A variation on a theorem of Ljunggren</i>
1996	Gerald Baygents	<i>Reducibility criterion in polyns. with non-negative coefficients</i>
1995	Patrick Harley	<i>On a generalization of an irreducibility theorem of I. Schur</i>
1995	Shannon Smith	<i>An algorithm of Lenstra, Lenstra, and Lovasz</i>
1989	Roger Rosenthal	<i>Dirichlet's theorem for polynomials</i>
1989	Grace De Ramos	<i>Elementary approaches to a gap problem involving <math>k</math>-free numbers</i>
1989	Jacklyn Pitts	<i>On an irreducibility theorem of I. Schur</i>
1989	Angela Andrews	<i>On the density of irreducible polynomials with coefficients 0 and 1</i>
1988	Melonie Rodgers	<i>Problems and results on irreducible polynomials</i>
1987	Janis Alexander	<i>Irred. criteria for polynomials with non-negative coefficients</i>

**Current Students:**

Scott Dunn (Ph.D.), Joshua Harrington (Ph.D.)

**Conference Organization:**

PALmetto Number Theory Series, USC, 12/2012 (with Boylan and Thorne)  
 PALmetto Number Theory Series, USC, 12/2010 (with Boylan)  
 PALmetto Number Theory Series, USC, 12/2009 (with Boylan)  
 Workshop on Discovery and Experimentation in Number Theory, Fields Institute, Toronto, Canada, 09/2009 (with Borwein, Hare, Mossinghoff, Smyth)  
 PALmetto Number Theory Series, USC, 12/2008 (with Boylan & Trifonov)  
 PALmetto Number Theory Series, USC, 2007 (with Boylan & Trifonov)  
 Illinois Number Theory Fest, UIUC, 2007 (with Berndt, Daimond & Ford)  
 PALmetto Number Theory Series, USC, 2006 (with Boston & Boylan)  
 South East Regional Meeting On Numbers, USC, 2005 (with Murhpy, Trifonov & Yu)  
 MSRI Summer Graduate Program (jointly with P. Borwein, 2 weeks in 06/02)  
 Session of AMS Sectional Meeting in Columbia, SC, 2001 (with Trifonov)  
 South East Regional Meeting On Numbers, USC, 1999 (with Trifonov, Ford & Hudson)  
 Session of AMS Sectional Meeting in DeKalb, Illinois, 1993 (with Pomerance)  
 South East Regional Meeting On Numbers, USC, 1993

**Recent Invited Lectures (since 2002):**

*A polynomial problem of Turán modulo primes*, AMS Sectional Meeting, Special Session on the Coverings of the Integers, San Diego, CA (01/11/13)

49598666989151226098104244512918, Univ. of Waterloo Number Theory Seminar (12/18/12)

49598666989151226098104244512918, Univ. of Illinois Number Theory Seminar (10/18/12)

49598666989151226098104244512918 and 8592444743529135815769545955936773, AMS Sectional Meeting, Special Session on Analytic Number Theory, Rochester, NY (09/23/12)

*On a polynomial conjecture of Turán*, Canadian Number Theory Association Meeting, Lethridge, Canada (06/21/12)

*A survey of results related to the Galois structure of Laguerre polynomials*, Olemiss Seminar, The University of Mississippi, MS (10/21/11)

*A polynomial conjecture of P. Turán*, Olemiss Colloquium, The University of Mississippi, MS (10/20/11)

*Four Seemingly Unrelated Problems*, Georgia Tech Seminar, Georgia Tech, GA (02/25/11)

*On the irreducibility and Galois structure of Laguerre polynomials*, XXI<sup>st</sup> Rencontres Arithmétiques de Caen, Factorisation des nombres entiers et des polynômes, Université de Caen, Caen, France (06/25/10)

*A survey of results related to the Galois structure of Laguerre polynomials*, Diophantine Approximation and Analytic Number Theory: A Tribute to Cam Stewart, Banff International Research Station, Banff, Canada (06/03/10)

*Missed it by that much*, AMS Session on “Special Session on Analytic Number Theory,” Penn State, State College, PA (10/25/09)

*Open problems on covering systems*, Workshop on Discovery and Experimentation in Number Theory, Fields Institute, Toronto, Canada (09/25/09)

*Open problems on covering systems*, AMS Session on “Number Theory in the Spirit of Erdős,” University of Illinois, Urbana, IL (03/28/09)

*Diophantine equations arising from the study of Galois groups*, Hans Heilbronn 100th Birthday Conference, University of Bristol, Bristol, UK (09/25/08)

*Miscellaneous problems on the factorization of  $0,1$ -polynomials*, Conference on the Mathematical Interests of Peter Borwein, IRMACS, Simon Fraser University, Vancouver, CA (05/08)

*A Diophantine problem arising from a study in Galois groups*, Spring Western AMS Sectional Meeting, Claremont McKenna College, Claremont, CA, Special Session on Diophantine Problems and Discrete Geometry (05/08)

*Diophantine equations arising from the study of Galois groups*, Colloquium at Kent State University (04/08)

*Irreducibility and gcd algorithms for sparse polynomials*, Texas A&M Number Theory Seminar (03/08)

*Irreducibility and gcd algorithms for sparse polynomials*, Illinois Number Theory Fest, University of Illinois, Urbana, IL (05/07)

*Prime divisors of binomial coefficients and the like*, AMS Regional Meeting, Hoboken, NJ (04/07)

*Some recent applications of covering systems of the integers*, AMS Regional Meeting, Davidson College, NC (03/07)

*Applications of Padé approximants to number theory*, Concordia University (Montreal, Quebec, Canada), Number Theory Seminar (01/07)

*Irreducibility and gcd algorithms for sparse polynomials*, University of Montreal (Montreal, Quebec, Canada), Number Theory Seminar (01/07)

*Irreducibility and coprimality algorithms for sparse polynomials*, Number Theory and Polynomials Conference, Bristol, England (04/06)

*Different uses of Diophantine analysis in the theory of irreducibility*, Diophantine Equations Conference at the Tata Institute of Fundamental Research in Honor of T. N. Shorey's 60th birthday, Mumbai, India (12/05)

*Recent advances in covering problems*, Combinatorial and Additive Number Theory (CANT 2005), in honor of Mel Nathanson, New York, NY (05/05)

*Recent advances in covering problems*, The Pacific North West Number Theory Conference IX, Simon Fraser University, Vancouver, CA (04/05)

*Applications of Padé Approximations of  $(1 - z)^k$  to Number Theory*, BIRS Workshop on Diophantine Approximation and Analytic Number Theory, Banff, CA (11/04)

*Some remarkable polynomials*, The 19th Clemson mini-Conference on Discrete Mathematics and Related Fields, Clemson, SC (10/04)

*Applications of Padé Approximations of  $(1 - z)^k$  to Number Theory*, REU Talk, Clemson University, Clemson, SC (06/03)

*Primality Testing in Polynomial Time*, Colloquium for the Department of Computer Science and Engineering at USC, Columbia, SC (10/02)

*Applications of Padé Approximations of  $(1 - z)^k$  to Number Theory*, Penn State, State College, PA (04/02)

*On the factorization of  $n(n + 1)$* , AMS Regional Meeting, Atlanta, GA (03/02)

### **Miscellaneous Other Lectures (since 2002):**

*A Polynomial Conjecture of Turán Rerevisited Again*, PANTS XV, Clemson, SC (02/11)

*Uncovering the generalized Laguerre polynomials with Galois group  $A_n$* , PANTS XII, Clemson, SC (02/10)

*Bounding the number of integer points that satisfy at least one of a particular infinite collection of hyperelliptic curves*, South East Regional Meeting On Numbers, College of Charleston, Clemson University, Clemson, SC (04/08)

*Truncated binomial expansions*, South East Regional Meeting On Numbers, College of Charleston, Furman University, Greenville, SC (03/06)

*A generalization of a third irreducibility theorem of I. Schur*, South East Regional Meeting On Numbers, College of Charleston, Charleston, SC (04/04)

*On the factorization of  $f(x)x^n + g(x)$* , South East Regional Meeting On Numbers, University of North Carolina at Greensboro, Greensboro, NC (03/03)

*On the factorization of  $x^2 + x$  and the non-factorization of  $x^2 + 7$* , West Coast Number Theory Conference at San Francisco State University, San Francisco, CA (12/02)

Series of Nine Lectures for a MSRI Summer Graduate Program: Excursions in Computational Number Theory, Polynomials with Integer Coefficients, Simon Fraser University, Vancouver (06/02)

*On the factorization of  $x^2 + x$  and  $x^2 + 7$* , South East Regional Meeting On Numbers, Clemson University, Clemson, SC (03/02)

**Refereed for the Following:**

Acta Arithmetica  
Acta Mathematica Sinica  
Advances in Applied Mathematics  
Annales des Sciences Mathematiques du Quebec  
Ars Combinatoria  
British Journal of Applied Science & Technology  
Bulletin of the London Mathematical Society  
Bulletin of the Malaysian Mathematical Society  
Canadian Mathematical Bulletin  
Central European Journal of Mathematics  
Contemporary Mathematics  
Discrete Mathematics  
l'Enseignement Mathematique  
Fibonacci Quarterly  
Glasgow Mathematical Journal  
Illinois Journal of Mathematics  
Indagationes Mathematicae  
Integers: Electronic Journal of Combinatorial Number Theory  
International Journal of Mathematics and Mathematical Sciences  
International Journal of Number Theory  
Journal of Algebra and Its Applications  
Journal für die reine und angewandte Mathematik (Crelle's Journal)  
Journal of Combinatorial Theory, Series A  
Journal of Combinatorics and Number Theory  
Journal of Graph Theory  
Journal of Inequalities in Pure and Applied Mathematics  
Journal of Integer Sequences  
Journal of Number Theory  
Journal of Systems and Software  
Journal of Theoretical Biology  
Mathematica Slovaca  
Mathematical Monthly  
Mathematical Proceedings of the Cambridge Philosophical Society  
Mathematical Reports for the Canadian Academy of Sciences  
Mathematics of Computation  
Monatshefte für Mathematik  
Nagoya Mathematical Journal

New Zealand Journal of Mathematics  
Pacific Journal of Mathematics  
Proceedings of the American Mathematical Society  
Proceedings of the London Mathematical Society  
Publicationes Mathematicae Debrecen  
Ramanujan Journal  
Revista Colombiana de Matematicas  
Rocky Mountain Journal of Mathematics  
SIAM Journal on Discrete Mathematics  
Topology and Its Applications  
Transactions of the American Mathematical Society  
Mathematical Reviews  
Springer-Verlag (CMS book series)  
SPECTRUM Series of Books for the MAA  
Proceedings of Conferences (from Canada, Cardiff, Illinois, & Poland)

**Miscellaneous Other Activities:**

Editorial board for the International Journal of Number Theory (2012-present)  
ASPIRE Award review committee (2012-present)  
AMS-MAA Committee on Mathematicians with Disabilities (2011-present)  
Mungo Graduate Teaching Award Committee (2010-present)  
South Carolina Math Advisory Panel (for the SC State Department of Education; 2008)  
Spectrum Editorial Board for the MAA (2001-2007)  
Collaborating Editor for the Problem Section of the Mathematical Monthly (1991-1997)  
Grader for the William Lowell Putnam Competition (1996, 1997, 1999, 2002)  
Member of the All-State High School Mathematics Selection Committee (1990-2005)

## MAIN RESEARCH PUBLICATIONS

- [1] M. Filaseta and S. Gross, *49598666989151226098104244512918*, submitted.
- [2] E. Dobrowolski, M. Filaseta and A. Vincent, *The non-cyclotomic part of  $f(x)x^n + g(x)$  and roots of reciprocal polynomials off the unit circle*, International Journal of Number Theory, to appear.
- [3] M. Filaseta, *Is every polynomial with integer coefficients near an irreducible polynomial?*, Elemente der Mathematik, to appear.
- [4] P. Banerjee, M. Filaseta, C. E. Finch and J. R. Leidy, *On classifying Laguerre polynomials which have Galois group the alternating group*, Journal de Théorie des Nombres de Bordeaux, to appear.
- [5] Michael Filaseta and Josh Harrington, *A polynomial investigation inspired by work of Schinzel and Sierpiński*, Acta Arith. 155 (2012), 149–161.
- [6] Michael Filaseta, Travis Kidd and Ognian Trifonov, *Laguerre polynomials with Galois group  $A_m$  for each  $m$* , Journal of Number Theory, 132 (2012), 776–805.
- [7] Michael Filaseta, Shanta Laishram and N. Saradha, *Solving  $n(n+d)(n+(k-1)d) = by^2$  with  $P(b) \leq Ck$* , International Journal of Number Theory 8 (2012), 161–173.
- [8] Michael Filaseta and Michael J. Mossinghoff, *The distance to an irreducible polynomial, II*, Math. Comp. 81 (2012), 1571–1585.
- [9] Michael Filaseta, Mark Kozek, Charles Nicol and John Selfridge, *Composites that remain composite after changing a digit*, Journal of Combinatorics and Number Theory 2 (2010), 25–36.
- [10] Dan Baczkowski, Michael Filaseta, Florian Luca and Ognian Trifonov, *On values of  $d(n!)/m!$ ,  $\phi(n!)/m!$  and  $\sigma(n!)/m!$* , International Journal of Number Theory 6 (2010), 1199–1214.
- [11] Pradipto Banerjee and Michael Filaseta, *On a polynomial conjecture of Pál Turán*, Acta Arithmetica 143 (2010), 239–255.
- [12] Michael A. Bennett, Michael Filaseta and Ognian Trifonov, *On the factorization of consecutive integers*, J. Reine Angew. Math. (Crelle’s Journal) 629 (2009), 171–200.
- [13] Michael Bennett, Michael Filaseta and Ognian Trifonov, *Yet another generalization of the Ramanujan-Nagell equation*, Acta Arith. 134 (2008), 211–217.
- [14] Michael Filaseta, Carrie Finch and Mark Kozek, *On powers associated with Sierpinski numbers, Riesel numbers and Polignac’s conjecture*, Journal of Number Theory 128 (2008), 1916–1940.

- [15] Michael Filaseta, Andrew Granville and Andrzej Schinzel, *Irreducibility and greatest common divisor algorithms for sparse polynomials*, Number Theory and Polynomials (ed. James McKee and Chris Smyth), LMS Lecture Note Series 352, Cambridge Univ. Press, 2008, pp. 155–176.
- [16] Michael Filaseta, Carrie Finch and J Russell Leidy, *T. N. Shorey's influence in the theory of irreducible polynomials*, Diophantine Equations (ed. N. Saradha), Narosa Publ. House, New Delhi, 2008, pp. 77–102.
- [17] Michael Filaseta, Florian Luca, Pantelimon Stănică, and Robert Underwood, *Galois groups of polynomials arising from circulant matrices*, Journal of Number Theory 128 (2008), 59–70.
- [18] Michael Filaseta, Florian Luca, Pantelimon Stănică, and Robert Underwood, *Two Diophantine approaches to the irreducibility of certain trinomials*, Acta Arithmetica 128 (2007), 149–156.
- [19] Michael Filaseta, Angel Kumchev and Dima Pasechnik, *On the irreducibility of a truncated binomial expansion*, Rocky Mountain J. Math. 37 (2007), 455–464.
- [20] Michael Filaseta, Kevin Ford, Sergei Konyagin, Carl Pomerance and Gang Yu, *Sieving by large integers and covering systems of congruences*, Journal of the AMS, 20 (2007), 495–517.
- [21] Michael Filaseta, Carrie Finch, and Charles Nicol, *On three questions concerning 0, 1-polynomials*, Journal de Théorie des Nombres de Bordeaux, 18 (2006), 357–370.
- [22] Michael Filaseta and Douglas B. Meade, *Irreducibility testing of lacunary 0, 1-polynomials*, J. Algorithms, 55(1):21–28, 2005.
- [23] Michael Filaseta and Manton Matthews, Jr., *On the irreducibility of 0, 1-polynomials of the form  $f(x)x^n + g(x)$* , Colloq. Math., 99(1):1–5, 2004.
- [24] Martha Allen and Michael Filaseta, *A generalization of a third irreducibility theorem of I. Schur*, Acta Arith., 114(2):183–197, 2004.
- [25] Michael Filaseta and Andrzej Schinzel, *On testing the divisibility of lacunary polynomials by cyclotomic polynomials*, Math. Comp., 73(246):957–965 (electronic), 2004.
- [26] Martha Allen and Michael Filaseta, *A generalization of a second irreducibility theorem of I. Schur*, Acta Arith., 109(1):65–79, 2003.
- [27] Michael Filaseta and Richard L. Williams, Jr., *On the irreducibility of a certain class of Laguerre polynomials*, J. Number Theory, 100(2):229–250, 2003.
- [28] Michael Filaseta, *Coverings of the integers associated with an irreducibility theorem of A. Schinzel*, In Number theory for the millennium, II (Urbana, IL, 2000), pages 1–24, A K Peters, Natick, MA, 2002.
- [29] M. Filaseta and T.-Y. Lam, *On the irreducibility of the generalized Laguerre polynomials*, Acta Arith., 105(2):177–182, 2002.

- [30] Arnold Adelberg and Michael Filaseta, *On  $m$ th order Bernoulli polynomials of degree  $m$  that are Eisenstein*, Colloq. Math., 93(1):21–26, 2002.
- [31] Michael Filaseta and Ognian Trifonov, *The irreducibility of the Bessel polynomials*, J. Reine Angew. Math., 550:125–140, 2002.
- [32] Brian Beasley and Michael Filaseta, *A distribution problem for powerfree values of irreducible polynomials*, Period. Math. Hungar., 42(1-2):123–144, 2001.
- [33] M. Filaseta, K. Ford, and S. Konyagin, *On an irreducibility theorem of A. Schinzel associated with coverings of the integers*, Illinois J. Math., 44(3):633–643, 2000.
- [34] A. Borisov, M. Filaseta, T. Y. Lam, and O. Trifonov, *Classes of polynomials having only one non-cyclotomic irreducible factor*, Acta Arith., 90(2):121–153, 1999.
- [35] Michael Filaseta, *On the factorization of polynomials with small Euclidean norm*, In Number theory in progress, Vol. 1 (Zakopane-Kościelisko, 1997), pages 143–163, de Gruyter, Berlin, 1999.
- [36] Michael Filaseta and Ikhalfani Solan, *An extension of a theorem of Ljunggren*, Math. Scand., 84(1):5–10, 1999.
- [37] Michael Filaseta and Sergeĭ Konyagin, *On a limit point associated with the abc-conjecture*, Colloq. Math., 76(2):265–268, 1998.
- [38] J. Browkin, M. Filaseta, G. Greaves, and A. Schinzel, *Squarefree values of polynomials and the abc-conjecture*, In Sieve methods, exponential sums, and their applications in number theory (Cardiff, 1995), volume 237 of *London Math. Soc. Lecture Note Ser.*, pages 65–85, Cambridge Univ. Press, Cambridge, 1997.
- [39] Michael Filaseta and Ikhalfani Solan, *Norms of factors of polynomials*, Acta Arith., 82(3):243–255, 1997.
- [40] Michael Filaseta, *The smallest maximal set of pairwise disjoint partitions*, In Number theory (New York, 1991–1995), pages 103–113, Springer, New York, 1996.
- [41] Michael Filaseta, *A generalization of an irreducibility theorem of I. Schur*, In Analytic number theory, Vol. 1 (Allerton Park, IL, 1995), volume 138 of *Progr. Math.*, pages 371–396, Birkhäuser Boston, Boston, MA, 1996.
- [42] Michael Filaseta and Ognian Trifonov, *The distribution of fractional parts with applications to gap results in number theory*, Proc. London Math. Soc. (3), 73(2):241–278, 1996.
- [43] Michael Filaseta and Sergei Konyagin, *Squarefree values of polynomials all of whose coefficients are 0 and 1*, Acta Arith., 74(3):191–205, 1996.
- [44] Michael Filaseta, *The irreducibility of all but finitely many Bessel polynomials*, Acta Math., 174(2):383–397, 1995.
- [45] Michael Filaseta, *Powerfree values of binary forms*, J. Number Theory, 49(2):250–268, 1994.

- [46] Michael Filaseta and Ognian Trifonov, *The distribution of squarefull numbers in short intervals*, Acta Arith., 67(4):323–333, 1994.
- [47] Michael Filaseta, M. L. Robinson, and Ferrell S. Wheeler, *The minimal Euclidean norm of an algebraic number is effectively computable*, J. Algorithms, 16(2):309–333, 1994.
- [48] Michael Filaseta, *On the distribution of gaps between squarefree numbers*, Mathematika, 40(1):88–101, 1993.
- [49] R. Blecksmith, M. Filaseta, and C. Nicol, *A result on the digits of  $a^n$* , Acta Arith., 64(4):331–339, 1993.
- [50] Michael Filaseta, *Short interval results for  $k$ -free values of irreducible polynomials*, Acta Arith., 64(3):249–270, 1993.
- [51] M. Filaseta and S. W. Graham, *An estimate for the number of reducible Bessel polynomials of bounded degree*, Colloq. Math., 65(1):65–68, 1993.
- [52] Michael Filaseta and Ognian Trifonov, *On gaps between squarefree numbers, II*, J. London Math. Soc. (2), 45(2):215–221, 1992.
- [53] Michael Filaseta, *Squarefree values of polynomials*, Acta Arith., 60(3):213–231, 1992.
- [54] Michael Filaseta, *On an irreducibility theorem of I. Schur*, Acta Arith., 58(3):251–272, 1991.
- [55] Michael Filaseta and Ognian Trifonov, *On gaps between squarefree numbers*, In Analytic number theory (Allerton Park, IL, 1989), volume 85 of *Progr. Math.*, pages 235–253, Birkhäuser Boston, Boston, MA, 1990.
- [56] Michael Filaseta, *Rouché’s theorem for polynomials*, Amer. Math. Monthly, 97(9):834–835, 1990.
- [57] Michael Filaseta, *Short interval results for squarefree numbers*, J. Number Theory, 35(2):128–149, 1990.
- [58] Michael A. Filaseta and David R. Richman, *Sets which contain a quadratic residue modulo  $p$  for almost all  $p$* , Math. J. Okayama Univ., 31:1–8, 1989.
- [59] Michael Filaseta, *An elementary approach to short interval results for  $k$ -free numbers*, J. Number Theory, 30(2):208–225, 1988.
- [60] Michael Filaseta, *Prime values of irreducible polynomials*, Acta Arith., 50(2):133–145, 1988.
- [61] Michael Filaseta, *Irreducibility criteria for polynomials with nonnegative coefficients*, Canad. J. Math., 40(2):339–351, 1988.
- [62] Michael Filaseta, *Sets with elements summing to squarefree numbers*, C. R. Math. Rep. Acad. Sci. Canada, 9(5):243–246, 1987.
- [63] Michael Filaseta, *The irreducibility of almost all Bessel polynomials*, J. Number Theory, 27(1):22–32, 1987.

- [64] Michael Filaseta, *Newton's method and simple continued fractions*, Fibonacci Quart., 24(1):41–46, 1986.
- [65] Michael Filaseta, *A new method for solving a class of ballot problems*, J. Combin. Theory Ser. A, 39(1):102–111, 1985.
- [66] Michael Filaseta, *An application of Faltings' results to Fermat's last theorem*, C. R. Math. Rep. Acad. Sci. Canada, 6(1):31–33, 1984.
- [67] Michael Filaseta, *A further generalization of an irreducibility theorem of A. Cohn*, Canad. J. Math., 34(6):1390–1395, 1982.
- [68] John Brillhart, Michael Filaseta, and Andrew Odlyzko, *On an irreducibility theorem of A. Cohn*, Canad. J. Math., 33(5):1055–1059, 1981.
- [69] Michael Filaseta, *On evaluating the Legendre symbol*, Pi Mu Epsilon Journal, 7:165–168, 1980.

**OTHER PUBLICATIONS: COMMENTARY, LETTER,  
PROBLEMS AND SOLUTIONS**

- [70] Michael Filaseta, *Commentary on Schinzel's polynomial results in one variable*, in Andrzej Schinzel's Selecta, Vol. 1, European Math. Soc., 2007, 283–294.
- [71] Michael A. Filaseta, *Problem: 10640*, Amer. Math. Monthly, 105(1):69, 1998.
- [72] M. Filaseta and C. Nicol, *Problem: 10423*, Amer. Math. Monthly, 101(10):1014, 1994.
- [73] Michael Filaseta, *Solution of Advanced Problem: 6540*, Amer. Math. Monthly, 96(2):165–166, 1989.
- [74] Michael Filaseta, *Problem: 244*, The Two-Year College Math. J., 14(2):173, 1983.
- [75] Michael Filaseta, *Letter: War without end*, Math. Mag., 51:256, 1978.
- [76] Michael Filaseta, *Solution of Problem: 60*, The Two-Year College Math. J., 9(5):299, 1978.
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