

CURRICULUM VITAE

as of 2019

TITLE, NAME, LAST NAME : Associate Professor Hamza Yeşilyurt

1. PERSONAL DATA

- 1.1 BIRTH DATE AND PLACE : February 14, 1971, Hendek, Turkey.
1.2 ADDRESS : Bilkent Üniversitesi
Matematik Bölümü
06800 Bilkent, Ankara,
TURKEY
1.3 PHONE : 90-312-290 1897
1.4 FAX : 90-312-290 5097
1.5 E-MAIL : hamza@fen.bilkent.edu.tr
1.6 URL : <http://www.fen.bilkent.edu.tr/~hamza>
1.7 MARITAL STATUS : Married, one child.

2. ACADEMIC DEGREES

- 2.1 Doçent, Algebra and Number Theory 2013
YÖK, Higher Education Council of Turkey
2.2 Ph.D., Mathematics 2004
University of Illinois at Urbana-Champaign, U.S.A.
2.3 M.S., Mathematics 1998
University of Wisconsin at Milwaukee, U.S.A.
2.3 B.S., Mathematics 1992
Karadeniz Technical University, Turkey

3. EMPLOYMENT HISTORY

- 3.1 2015-Present Associate Professor,
Department of Mathematics,
Bilkent University,
Ankara, Turkey

- 3.2 2007-2015 Assistant Professor,
Department of Mathematics,
Bilkent University,
Ankara, Turkey

- 3.3 2004-2007 John G. Thompson Visiting Research Assistant Professor,
Department of Mathematics,
University of Florida,
Gainesville, Florida, U.S.A

- 3.4 1998-2004 Teaching Assistant,
Department of Mathematics,
University of Illinois at Urbana-Champaign,
Urbana, Illinois, U.S.A.

4. SCHOLARSHIPS AND AWARDS

- | | | |
|-----|--|------|
| 4.1 | Sedat Simavi Science Award
Turkish Journalist Association | 2014 |
| 4.2 | 2013 Masatoshi Gündüz Ikeda Research Award
Mathematics Foundation of Turkey | 2014 |
| 4.3 | William F. Ames JMAA Best Paper Award
Journal of Mathematical Analysis and Applications | 2013 |
| 4.4 | Bateman Prize in Number Theory
University of Illinois at Urbana-Champaign | 2004 |

7. INVITED LECTURES AND TALKS

- | | | |
|-----|---|---------------------|
| 7.1 | “Shifless and shifted partition identities”, IMBM Discete
Math Days, Bogazici Universitesi . | Istanbul, 2018 |
| 7.2 | “Ramanujan’s circular summation, t-cores and twisted
partition identities”, AMS sectional meeting 2227 . | New Brunswick, 2015 |
| 7.3 | “On Rogers-Ramanujan functions, binary quadratic
forms and eta-quotients”, Antalya Algebra Days XVII . | Selcuk, 2015 |
| 7.4 | “On Rogers-Ramanujan functions, binary quadratic
forms and eta-quotients”, Sastra Ramanujan Prize, Sas-
tra University . | Kumbakom, 2015 |
| 7.5 | “Some identities of Ramanujan for the third order mock
theta functions”, Middle East Technical University Gen-
eral Seminar . | Ankara, 2014 |
| 7.6 | “Ramanujan’s Circular Summation Formula and Appli-
cations”, Ankara University General Seminar . | Ankara, 2013 |

- 7.7 “On Rogers-Ramanujan functions, binary quadratic forms and eta-quotients”, Ramanujan 125 Conference. Gainesville, Florida, 2012
- 7.8 “New Observations on Ramanujan’s Identities for the Rogers-Ramanujan Functions”, University of Florida Number Theory Seminar. Gainesville, Florida , 2012
- 7.9 “Ramanujan’s Contributions to the Theory of Partitions”, Koç University Colloquium. İstanbul, 2011
- 7.10 “Ramanujan’s Forty Identities For the Rogers-Ramanujan Functions”, Indian Mathematical Society meeting at Infosys. Bangalore, India, 2009
- 7.11 “Shifted and shiftless partition identities”, Middle East Technical University General Seminar Ankara, 2008
- 7.12 “Representation of integers by quadratic forms”, National Mathematics Symposium. İstanbul, 2008
- 7.13 “Equalities and inequalities for seven-cores”, Conference on q -series and modular forms . Gainesville, Florida, 2008
- 7.14 “Ramanujan’s forty identities for the Rogers-Ramanujan functions”, Pennsylvania State University General Seminar. State College, 2006
- 7.15 “Number of representations of integers by certain binary quadratic forms”, Temple University General Seminar. Philadelphia, 2006
- 7.16 “New identities for 7-cores with prescribed BG-rank”, AMS special session: q -series and partitions. AMS meeting #1018 . San Francisco, 2006
- 7.17 “A Generalization of a Modular Identity of L.G. Rogers and Applications to Modular Equations”, Conference on Combinatorial and Additive Number Theory (CANT 2005). New York, 2005

- 7.18 “Four Identities Related to Third Order Mock Theta Functions in the Lost Notebook”, AMS special session : q -series in Number Theory and Combinatorics. AMS meeting #984. Baton Rouge, 2003
- 7.19 “The Periodicity of the Signs of the Coefficients of Certain Infinite Products”, Midwest Number Theory Conference for Graduate Students And New PhD’s. Wisconsin, 2003

9. TEACHING

9.1 GRADUATE COURSES :

MATH 551 Topics in Number Theory

9.2 UNDERGRADUATE COURSES :

MATH 101 Calculus I

MATH 102 Calculus II

MATH 111 Intermediate Calculus I

MATH 116 Intermediate Calculus III

MATH 132 Discrete and Combinatorial Mathematics

MATH 214 Advanced Calculus II

MATH 223 Linear Algebra I

MATH 253 Introduction to Number Theory

MATH 420 Introduction to Cryptography

MATH 453 Algebraic Number Theory

10. GRADUATE STUDENT SUPERVISION

10.1 Oğuz Gezmiş, M.Sc., 2014
“ Spt-Function and its Properties ”

10.2 Emrah Karagöz, M.Sc., 2014
“Incremental Hush Functions”

- 10.3 Cisem Güneş, M.Sc., 2010
 “Construction of Modular Forms with Poincaré Series”
- 10.4 Zafer Selçuk Aygün , M.Sc., 2009
 “Ramanujan’s Congruences for the partition function”

11. PATENTS

N/A

12. SCHOLARLY PUBLICATIONS

12.1 PH.D. DISSERTATION

- 12.1.1 Contributions to the Theory of q -Series and Mock Theta Functions
 Advisor: Bruce C. Berndt
 2004, University of Illinois at Urbana-Champaign.

12.2 PUBLISHED BOOKS

12.3 EDITED BOOKS

12.4 CHAPTERS IN BOOKS OR MONOGRAPHS

- 12.4.1 “Ramanujan’s Forty Identities for the Rogers-Ramanujan Functions”, in
 Ramanujan’s Lost Notebook Part III (Edited by George E. Andrews, and
 Bruce C. Berndt). New York: Springer, 2012, 217–333.

12.5 REVIEWS

12.6 ARTICLES IN REFEREED JOURNALS

- 12.6.1 A. Berkovich, F. Garvan, H. Yesilyurt, “Ramanujan’s circular summation, t -cores and twisted partition identities”, J. Math. Anal. Appl. 479 (2019), no. 1, 773-788.
- 12.6.2 A. Berkovich, H. Yesilyurt, “On Rogers-Ramanujan functions, binary quadratic forms and eta-quotients”, Proc. Amer. Math. Soc. 142 (2014) 777-793.

- 12.6.3 H. Yesilyurt, “Elementary proofs of some identities of Ramanujan for the Rogers-Ramanujan functions”, *J. Math. Anal. Appl.* 388 (2012), no. 1, 420–434.
- 12.6.4 H. Yesilyurt, “A Generalization of a Modular Identity of Rogers”, *J. Number Theory* 129 (2009), no. 6, 1256–1271.
- 12.6.5 A. Berkovich, H. Yesilyurt, “On the representations of integers by the sextenary form $x^2 + y^2 + z^2 + 7(s^2 + t^2 + u^2)$ and 7-cores”, *J. Number Theory* 129 (2009), no. 6, 1366–1378.
- 12.6.6 A. Berkovich, H. Yesilyurt, “Ramanujan’s identities and representation of integers by certain binary and quaternary quadratic forms”, *Ramanujan Journal* 20 (2009) (3), pp. 375–408.
- 12.6.7 A. Berkovich, H. Yesilyurt, “New identities for 7-cores with prescribed BG-rank”, *Discrete Math.* 308 (22) (2008) 5246–5259.
- 12.6.8 F. Garvan, H. Yesilyurt, “Shifted and Shiftless Partitions Identities II”, *Int. J. Number Theory* 3 (2007), no. 1, 43–84.
- 12.6.9 S. H. Chan, H. Yesilyurt, “The Periodicity of the Signs of the Coefficients of Certain Infinite Products”, *Pacific Journal of Math.* 225 (2006), no. 1, 13–32.
- 12.6.10 B.C. Berndt, H. Yesilyurt, “New identities for Rogers-Ramanujan functions”, *Acta Arith.* 120 (2005), no. 4, 395–413.
- 12.6.11 H. Yesilyurt, “Four Identities Related to Third Order Mock Theta Functions in Ramanujan’s Lost Notebook”, *Adv. Math.* 190 (2005), no. 2, 278–299.
- 12.6.12 B. C. Berndt, S. H. Chan, and Z.-G. Liu, H. Yesilyurt, “A New Identity for $(q; q)_{\infty}^{10}$ with an Application to Ramanujan’s Partition Congruence Modulo 11”, *Quarterly J. Math.(Oxford)* 55 (2004), 13–30.
- 12.7 OTHER PUBLICATIONS, REPORTS ETC.

- 12.8.1 B. C. Berndt, G. Choi, Y.-S. Choi, H. Hahn, B. P. Yeap, A. J. Yee, H. Yesilyurt, and J. Yi, “Ramanujan’s forty identities for the Rogers–Ramanujan functions”, *Mem. Amer. Math. Soc.* **188** (2007), no. 880, vi+96 pp.

14. RESEARCH INTERESTS

- 14.1 q -series
14.2 Integer partitions
14.3 Elliptic (Theta) functions

15. GRANTS

- | | |
|--|-----------|
| 15.1 The Scientific and Technological Research Council of Turkey (TÜBİTAK) 1001 Research Grant, Grant number 112T180, Principal investigator, 85520 YTL (\sim 42760 USD). | 2012-2014 |
| 15.2 TÜBİTAK 1001 Research Grant, Grant number 109T669, Principal investigator, 59700 YTL (\sim 29850 USD). | 2010-2012 |

Preprints of the articles listed in Sections 12.6 and 12.8 can be found at
<http://www.fen.bilkent.edu.tr/~hamza>