

CURRICULUM VITAE

Name / Surname: Pembe Sabancıgil Özder
Sex: Female
Nationality: Turkish Cypriot (TRNC)
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Education

- Graduate :**
1. Eastern Mediterranean University, (2005- 2009)
Mathematics, **PhD**.
(*Thesis*: Bernstein Type Operators Based on q -Integers)
 2. Eastern Mediterranean University, (2003-2005)
Applied Mathematics (Statistics), **Msc**.
(*Thesis*: An Overview of Some Spatial Functions and Kriging with Applications)
 3. Eastern Mediterranean University, (2001-2003)
Mathematics and Computer Education,
Master of Education, Educational Sciences
- Undergraduate :** Eastern Mediterranean University, (1997-2001)
Applied Mathematics & Computer Sciences, **BSc**.
- High School :** 19 Mayıs Turk Maarif College, Girne.

List of Publications (Mathematics)

1. Sabancıgil, P. and Mahmudov, N., Novel Bernstein-Kantorovich Type Operators, Mathematical Methods in the Applied Sciences, <https://doi.org/10.1002/mma.70917>, 2026.
2. Kara M., Sabancıgil, P. and Mahmudov, N.I., Generalized Kantorovich type Szasz-Mirakjan operators based on q -integers, FILOMAT, vol.38, no:14, 2024.
3. Sabancıgil, P., Local Approximation Properties for the New Type q -Stancu-Durrmeyer Operators, Osmaniye Korkut Ata University, Journal of The Institute of Science and Technology, vol. 7, issue 1, 310-319, 2024.
<https://doi.org/10.47495/okufbed.1324813>.
4. Sabancıgil, P., Mahmudov, N.I., Dagbasi, G., A new type of Szasz-Mirakjan operators based on q -integers, Journal of Inequalities and Applications, 140, 2023.
5. Sabancıgil, P., Genuine q -Stancu-Bernstein-Durrmeyer Operators, Symmetry, 15(2), 437, 2023.
6. Sabancıgil, P., Kara M. and Mahmudov, N.I., Higher order Kantorovich-type Szasz-Mirakjan operators, Journal of Inequalities and Applications, 91, 2022.
7. Hamal, H. and Sabancıgil, P., Kantorovich Type Generalization of Bernstein Type Rational Functions Based on (p,q) -Integers, Symmetry, 2022, vol.14, issue 5, 1054.
8. Hamal, H. and Sabancıgil, P., Weighted Approximation Properties of New (p,q) -analogue of Balazs Szabados Operators, Journal of Applied Mathematics and Computation, 2021, 5(4), 373-381.
9. Hamal, H. and Sabancıgil, P., Some Approximation Properties of new (p,q) -analogue of Balázs-Szabados Operators, Journal of Inequalities and Applications, 162, 2021.
10. Sabancıgil, P., Kara M. and Mahmudov, N.I., Representation of the Matrix for Conversion between Triangular Bezier Patches and Rectangular Bezier Patches, Journal of Computational Analysis and Applications, vol.29, no.5, pp. 893-901, 2021.
11. Hamal, H. and Sabancıgil, P., Some Approximation Properties of new Kantorovich type q -analogue of Balazs Szabados Operators, Journal of Inequalities and Applications, 159, 2020.
12. Mahmudov, N. I. and Sabancıgil, P., Approximation Theorems for q -Bernstein-Kantorovich Operators, Filomat, vol.27:4, pp. 721-730, 2013.
13. Mahmudov, N. I. and Sabancıgil, P., A q -analogue of the Meyer-König and Zeller operators, Bulletin of the Malaysian Mathematical Sciences Society, (2) 35(1), pp. 39–51, 2012.

14. Mahmudov, N. I. and Sabancıgil, P., Voronovskaja Type Theorem for the Lupaş q -analogue of the Bernstein operators, Mathematical Communications, vol.17, pp. 83-91, 2012.
15. Mahmudov, N. I., Özarslan M.A. and Sabancıgil, P., I -Approximation Properties of Certain Class of Linear Positive Operators, Studia sci. Math Hungarica, vol.48, pp. 205-219, 2011.
16. Mahmudov, N. I. and Sabancıgil, P., On genuine q -Bernstein-Durrmeyer operators, Journal of Publicationes Mathematicae Debrecen, vol.76, 2010 .
17. Mahmudov, N. I. and Sabancıgil, P., Some Approximation Properties of q -parametric BBH Operators, Journal of Computational Analysis and Applications, vol.12, no.1, pp.111-123, 2010.
18. Sabancıgil P., Higher order generalization of q -Bernstein operators, Journal of Computational Analysis and Applications, vol.12, no.4, pp. 821-827, 2010.
19. Mahmudov, N. I. and Sabancıgil, P., q -parametric Bleimann Butzer and Hahn operators, Journal of Inequalities and Applications, Art. ID 816367, 15 pp, 2008.

List of Conference Publications

1. Hamal, H. and Sabancıgil, P., Kantorovich Type (p,q) -Generalization of Bernstein Operators, Proceedings of 6th International Conference on Computational Mathematics and Engineering Sciences ,CMES 2022, pp. 159-164, 20-22 May, 2022, Ordu, Turkey.
2. Hamal, H. and Sabancıgil, P., Weighted Approximation for Kantorovich Type q -Balazs-Szabados Operators, Proceedings of 5th International Conference on Computational Mathematics and Engineering Sciences, 21-23 May, 2021, Van, Yüzüncü Yıl Üniversitesi, Turkey.
3. Hamal, H. and Sabancıgil, P., Statistical approximation properties of new (p,q) -analogue of Balazs-Szabados Operators, Proceedings of Karabakh, II. International Congress of Applied Sciences, Azerbaijan National Academy of Sciences , vol.1, pp.232, 8-10 November, 2021, Azerbaijan.
4. Sabancıgil, P., New q -Stancu-Durrmeyer Operators and Their Moments, Proceedings of Euro Asia 8th. International Congress On Applied Sciences, pp. 51-55, 15-16 March, 2021, Tashkent Chemical-Technological Institute, Uzbekistan.
5. Sabancıgil, P. and Hamal. H., Kantorovich type (p,q) -analogue of Balazs-Szabados Operators, Proceedings of 1. International Scientific Research and Innovation Congress, pp. 49-54, 13-14 March 2021, Kazakhstan.

6. Hamal, H., Sabancıgil, P., The moments for new (p,q) -analogue of Balazs-Szabados Operators, Proceedings of 7. International Conference on Control and Optimization with Industrial Applications-COIA 2020, 26-28 August 2020, Baku, Azerbaijan.
7. Sabancıgil, P. and Kara M., Representation of the Matrix for Conversion between Triangular Bezier Patches and Rectangular Bezier Patches, ITM Web of Conf., vol.22, The Third International Conference on Computational Mathematics and Engineering Sciences, Girne, Cyprus, (2018).
8. Mahmudov, N. I. and Sabancıgil, P., Approximation Results for q -parametric BBH Operators, In Proceedings of The 2009 International Conference of Applied and Engineering Mathematics, London, UK, pp.1035-1039, July 2009.

List of Publications (Educational Sciences)

1. Özder, H., Konedralı, G. and Sabancıgil P., KKTC'de okulöncesi öğretmenliği programının değerlendirilmesi, International Journal of New Trends in Arts, Sports & Science Education - volume 2, issue 2, 2013.
2. Özder, H., Konedralı, G. and Sabancıgil, P., Öğretmen Adaylarının Bilgisayar Öz-Yeterlik Algılarının İncelenmesi: (KKTC Örneği). İnönü Üniversitesi Eğitim Fakültesi Dergisi, vol 11 (1), 2010.

Conferences

1. Sabancıgil, P., Bernstein-Durrmeyer operators providing a better estimation on $[1/3, 2/3]$, MICOPAM-2024, The 7th Mediterranean International Conference of Pure&Applied Mathematics and Related Areas, November, 26-29, 2024, Antalya-Turkey.
2. Sabancıgil, P., New Type of q -Bernstein Operators, GFSNP-2024, The 14th Symposium on Generating Functions of Special Numbers and Polynomials and their Applications, January 18-21, 2024, Antalya-Turkey.
3. Sabancıgil, P., Mahmudov, N., Dağbaşı, G., Weighted approximation properties of the modified q -Szász-Mirakjan operators, The 7th International Conference on Computational Mathematics and Engineering Sciences, 20-21 May 2023, Elazığ, Türkiye.
4. Sabancıgil, P., Some Approximation Properties of q -Stancu-Durrmeyer Operators, The 5th Mediterranean International Conference of Pure & Applied Mathematics and Related Areas, MICOPAM 2022, 27-30 October, 2022, Antalya, Turkey.

5. Hamal, H. and Sabancıgil, P., Kantorovich Type (p,q) -Generalization of Bernstein Operators, 6th International Conference on Computational Mathematics and Engineering Sciences ,CMES 2022, 20-22 May, 2022, Ordu, Turkey.
6. Hamal, H. and Sabancıgil, P., Weighted approximation for Bernstein-Kantorovich Operators, 7th International Erciyes Conference on Scientific Research , 9-10 March, 2022, Kayseri, Turkey.
7. Hamal, H. and Sabancıgil, P., Statistical approximation properties of new (p,q) -analogue of Balazs-Szabados Operators, Karabakh, II. International Congress of Applied Sciences, Azerbaijan National Academy of Sciences , 8-10 November, 2021, Azerbaijan.
8. Hamal, H. and Sabancıgil, P., Weighted Approximation of New (p,q) -analogue of Balazs-Szabados Operators, International Conference on Mathematics, Statistics and Applied Sciences (ICMSAS-21) , 25-26 October, 2021, Tashkent, Uzbekistan.
9. Hamal, H. and Sabancıgil, P., Statistical Approximation for Kantorovich Type q -Balazs-Szabados Operators, 9th International Conference on Applied Analysis and Mathematical Modeling, 11-13 June, 2021, İstanbul, Biruni University, Turkey.
10. Hamal, H. and Sabancıgil, P., Weighted Approximation for Kantorovich Type q -Balazs-Szabados Operators, 5th International Conference on Computational Mathematics and Engineering Sciences, 21-23 May, 2021, Van, Yüzüncü Yıl Üniversitesi, Turkey.
11. Sabancıgil, P., New q -Stancu-Durrmeyer Operators and Their Moments, Euro Asia 8th. International Congress On Applied Sciences, 15-16 March, 2021, Tashkent Chemical-Technological Institute, Uzbekistan.
12. Sabancıgil, P. and Hamal. H., Kantorovich type (p,q) -analogue of Balazs-Szabados Operators, 1. International Scientific Research and Innovation Congress, 13-14 March 2021, Kazakhstan.
13. Hamal, H., Sabancıgil, P., The moments for new (p,q) -analogue of Balazs-Szabados Operators, 7. International Conference on Control and Optimization with Industrial Applications-COIA 2020, 26-28 August 2020, Baku, Azerbaijan.
14. Sabancıgil, P. , Kara M. and Mahmudov, N.I, Representation of Solutions of Neutral Time Delay Equations and Ulam-Hyers Stability, 8th International Eurasian Conference on Mathematical Sciences and Applications, Baku, Azerbaijan, (2019)
15. Sabancıgil, P. and Kara M., Representation of the Matrix for Conversion between Triangular Bezier Patches and Rectangular Bezier Patches, 3rd International

Conference on Computational Mathematics and Engineering Sciences, Girne, Cyprus, (2018).

16. Mahmudov, N. I. and Sabancıgil, P., Approximation Results for q -parametric BBH Operators, International Conference of Applied and Engineering Mathematics, London, UK, pp.1035-1039, July 2009.
17. Mahmudov, N. I. and Sabancıgil, P., q -parametric Bleimann Butzer and Hahn operators, 4th International Conference on Mathematical Analysis, Differential Equations and Their Applications, Gazimağusa, TRNC, (2008).
18. Özder, H. and Sabancıgil P., Öğretmen Adaylarının Seçiminde Uygulanan Yazılı Sınavda Yer Alan Alt Testlerin Başarıyı Belirleme Gücü: Bir Lojistik Regresyon Analizi Çalışması, 2nd International Education Research and Teacher Education Congress, Kuşadası, (2018).
19. Özder, H., Sabancıgil, P., 2018-2019 Öğretim Yılı Kolejlere Giriş Sınavı (KGS)-1'de Yer Alan Matematik Sorularının Analizi, 6th International Eurasian Educational Research Congress (2019), Ankara Üniversitesi.
20. Konedralı, G., Özder, H. ve Sabancıgil, P., KKTC'de Hazırlanan Yeni Türkçe Ders Kitaplarının Değerlendirilmesi. Uluslararası Kıbrıs Üniversitesi 2. Uluslararası Türkçe Eğitimi ve Öğretimi Sempozyumu (2009).
21. Özder, H., Konedralı, G., Sabancıgil P., KKTC'de Okulöncesi Öğretmenliği Programının Değerlendirilmesi, New Trends on Global Education Conference, North Cyprus (2011).
22. Özder, H., Sabancıgil, P., Design of the Preschool Mathematics Curriculum Based on the Cubic Curriculum Development Approach, The Third International Congress on Curriculum and Instruction: Curriculum Studies in Higher Education (2015), Çukurova University, Adana.

Projects

Scientific Research Project (BAP-0804), T.R/T.R.N.C.

Project Title: q -Parametric Positive Linear Operators

Director of the Project: Prof. N. I. Mahmudov

Supervised Master Theses

Abubaker Banour Masoud Elatrash

Thesis title: Kantorovich Type q -Bernstein Polynomials
(completed, 2017)

Supervised PhD Theses

1. Hayatem Hamal

Thesis title : A New Kantorovich Type q -analogue of the Balázs-Szabados Operators
(completed, 2021)

2. Gizem Dağbaşı

Thesis title : Generalized Szasz-Mirakyan Operators
(completed, 2025)

Other Academic Activities

- Editorial Board member of “OKU Journal of Natural and Applied Sciences” 2024-present
- Section Editor in OKU Journal of Natural and Applied Sciences, 2021-present
- Editorial Board member of “Journal of Kadirli Faculty of Applied Sciences” 2022-present
- Assistant Editor of “European Journal of Science and Mathematics Education” (2013-2015)
- Jury member in the mathematics competition for primary schools.
- Reviewer at COIA 2020
- Reviewer at Mathematical Reviews.

Committee Memberships

- Mathematics Competition Committee member (2024- present)
- Emu, Faculty of Arts and Sciences, Mathematics Department, Prospective Students Committee member (2025 September-present)
- Emu, Faculty of Arts and Sciences, Mathematics Department, Head of the Social Media Committee (2025 September-present)
- Emu, Faculty of Arts and Sciences, Mathematics Department, Alumni Interaction Committee member (2025 September- present)
- Emu, Faculty of Arts and Sciences, Mathematics Department, Curriculum Committee member, (2025 September-present)
- Emu, Faculty of Arts and Sciences, Mathematics Department, Undergraduate Committee member (2025 September -present)
- Emu, Faculty of Arts and Sciences, Social Media Committee member (2018-2024)
- Emu, Social Awareness Center, Faculty representer (2019-2020)
- Emu, Faculty of Arts and Sciences, Exam Committee member (2008-2014)
- Emu, Mathematics Department, Promotion Committee member (2016-2021)

Academic Experience

Work Experience:

September 2015-present:	Associate Professor of Mathematics at Department of Mathematics, Eastern Mediterranean University.
September 2009 - July 2015:	Senior Instructor at Department of Mathematics, Eastern Mediterranean University.
September 2001 - September 2009:	Full-Time research assistant at Department of Mathematics, Eastern Mediterranean University.

Courses Taught

- Mate 202, Differential Equations II
- Math 151, Calculus I
- Mate 411, Orthogonal Polynomials
- Mate 303, Differential Geometry I
- Mate 304, Differential Geometry II
- Math 323, Probability Theory
- Math 322, Probability and Statistical Methods
- SPSS
- Math 324, Statistics
- Math 328, Introduction to Geostatistics
- Math 211, Introduction to Statistics
- Math 106, Linear Algebra
- Mate 315, Analysis 3
- Mate 320, Analytic Geometry
- Math 122, Analysis I
- Math 167, Mathematics for Social Sciences
- Bilg 101, Introduction to Computers
- Math 105, Mathematics for Economists
- Acts 202, Actuarial Mathematics

