

## Prof. YELDA AYGAR KÜÇÜKEVCİLİOĞLU

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### Biography

### Yayınlar:

49. Allahverdiev B. P., **Aygar Y.**, Examining singular dissipative quantum Sturm-Liouville operators in limit-circle case whenever  $q > 1$ , Facta Universitatis' Series Mathematics and Informatics, (accepted)
48. Özbey G. G., Öznur G. B., **Aygar Y.**, Aktaş Karaman R., Some Properties of Bessel Functions in Multiplicative Calculus, Rendiconti del Circolo Matematico di Palermo Series 2, volume 74, article number 42, 2025. <https://doi.org/10.1007/s12215-024-01149-6>.
47. Öznur G. B., Özbey G. G., **Aygar Y.**, Aktaş Karaman R., A Study of the scattering analysis of the multiplicative Sturm-Liouville problem, Turkish Journal of mathematics, 48: 608-622, 2024.
46. Allahverdiev B. P., **Aygar Y.**, Some spectral problems of dissipative  $q$ -Sturm-Liouville operators in limit-point case for  $q > 1$ , Filomat, 38(22), 7693–7705, 2024.
45. Öznur G. B., Bairamov E., **Aygar Y.**, Impulsive Discrete Dirac Equation with Spectral Parameter, Filomat, 38(22), 7673–7682, 2024.
44. Aktaş Karaman R., Gündoğan Lekesiz E., **Aygar Y.**, A Study on Sobolev orthogonal polynomials on triangle, Numerical Algorithms, 97(2), 915-944, 2024.
43. Öznur G. B., **Aygar Y.**, A Study of the scattering properties of eigenparameter dependent matrix difference operator with transmission condition, Kragujevac Journal of Mathematics, 50(3), 479-489, 2026.
42. Özbey G. G., **Aygar Y.**, Öznur G. B., Discrete Sturm-Liouville equations with point interaction, The Journal of Analysis, (2024) 32:1725–1737, 2024.
41. Cebesoy C., Bairamov E., **Aygar Y.**, Scattering problems of impulsive Schrödinger equations with matrix coefficients, Ricerche di Matematica, 72(1), 399-415, 2023.
40. Bairamov E., **Aygar Y.**, Cebesoy C., Spectral analysis of the impulsive quadratic pencil of Schrödinger operators with spectral singularities, Complex Variables and Elliptic Equations, 68(3), 430-444, 2023.
39. Öznur B., **Aygar Y.**, Aral N.D., An Examination of boundary value transmission problem with Quadratic Spectral Parameter, Quaestiones Mathematicae, 46(5), 871-885, 2023.

38. Taş H., **Aygar Kucukevcilioglu Y.**, Bayram E., Scattering solutions and scattering function of a Klein-Gordon s-wave equation with jump conditions, *Turkish Journal of Mathematics*, 47(2), 721-731, 2023.
37. Özbey G. G., Öznur G. B., **Aygar Y.**, Koprubası T., Some spectral and scattering properties of generalized eigenparameter dependent discrete transmission Sturm-Liouville equation, *Honam Mathematical Journal*, 45(3), 457-470, 2023.
36. Öznur G. B., **Aygar Y.**, Spectral analysis of a difference equation with interface conditions and hyperbolic eigenparameter on the whole axis, *Note di Matematica*, 43(1), 67-80, 2023.
35. Öznur G. B., Özbey G. G., **Aygar Y.**, Aktaş Karaman R., Miscellaneous properties of Sturm-Liouville problems in multiplicative calculus, *Commun. Fac. Sci. Univ. Ank. Ser. A1 Math. Stat.*, 72(4), 1141-1154, 2023.
34. **Aygar Y.**, Özbey G. G., Öznur G. B., Quantum difference problem with point interaction, *Konuralp Journal of Mathematics*, 11(2), 218-228, 2023.
33. **Aygar Kucukevcilioglu Y.**, Koprubası T., A discrete boundary value problem with point interaction, *Filomat*, 36:18, 6279-6288, 2022.
32. **Aygar Y.**, Özbey G. G., Scattering analysis of a quantum impulsive boundary value problem with spectral parameter, *Hacettepe Journal of Mathematics and Statistics*, 51:1, 142-155, 2022.
31. Koprubası T., **Aygar Kucukevcilioglu Y.**, Discrete impulsive Sturm-Liouville equation with hyperbolic eigenparameter, *Turkish Journal Of Mathematics*, 46, 387-396, 2022.
30. **Aygar Y.**, Özbey G., Spectral properties of a discrete Sturm-Liouville Equations, *Applied Mathematics E-Notes*, 22(2022), 335-344, 2022.
29. **Aygar Y.**, Öznur B., Matrix Difference Equations with jump conditions and hyperbolic eigenparameter, *Acta Mathematica Universitatis Comenianae*, XCI:2, 149-159, 2022.
28. **Aygar Y.**, Bairamov E., Series expansion, asymptotic behavior and computation of the values of the Schwarzschild-Milne integrals arising in a radiative transfer, [Applied and Computational Mathematic](#), 20 (2), 236-246, 2021.
27. **Aygar Kucukevcilioglu Y.**, Bairamov E., Özbey G., On the spectral and scattering properties of eigenparameter dependent impulsive Sturm-Liouville equations, *Turkish Journal Of Mathematics*, 45:2, 988-1000.
26. Bairamov E., **Aygar Y.**, Öznur, B., Scattering Properties of Eigenparameter Dependent Impulsive Sturm-Liouville Equations, [Bulletin of the Malaysian Mathematical Sciences Society](#), 43, 2769-2781, 2020.
25. Bairamov E., **Aygar Y.**, Cebesoy S., Investigation of Spectrum and Scattering Function of Impulsive Matrix Difference Operators, [Filomat](#), 35:5, 1301-1312, 2019.
24. **Aygar Y.**, Bairamov E., Scattering Theory of Impulsive Sturm-Liouville Equation in Quantum Calculus, *Bulletin of the Malaysian Mathematical Sciences Society*, (2019) 42, 3247-3259, 2019.
23. Bairamov E., **Aygar Y.**, Cebesoy S., Spectral properties of quadratic pencil of Schrödinger equations with transmission conditions, *IOP Conf. Series: Journal of Physics: Conf. Series*, 1053 (2018), 2018.
22. **Aygar Y.**, Bairamov E., Özbey G. Spectral properties and scattering problems of eigenparameter dependent impulsive Sturm-Liouville equations, *Proceedings of the 6th International Conference on Control and Optimization with Industrial Applications*, vol1, 113-115, 2018.
21. Bairamov E., **Aygar Y.**, Karshoglu D., Scattering Analysis and Spectrum of Discrete Schrödinger Equations with Transmission Conditions, *Filomat*, 31:17, 5391-5399, 2017.
20. Bairamov E., **Aygar Y.**, Eren B., Scattering Theory of Impulsive Sturm-Liouville Equations, *Filomat*, 31:17, 5401-

5409, 2017.

19. **Aygar Y.**, Bairamov E., Yardımcı S., A Note on spectral properties of a Dirac system with matrix coefficient, *Journal of Nonlinear Sciences and Applications*, 10 (2017), 1459–1469, 2017.
18. **Aygar Y.**, The Effects of Hyperbolic Eigenparameter on Spectral Analysis of a Quantum Difference Equations, *Malaysian Journal of Mathematical Sciences*, 11:3, 317-330, 2017.
17. **Aygar Y.**, A Research on Spectral Analysis of a matrix Quantum Difference Equations with Spectral Singularities, *Quaestiones Mathematicae*, 40 (2) 245-249, 2017.
16. Bairamov E., **Aygar Y.**, Cebesoy S., Spectral analysis of a self-adjoint matrix-valued discrete operator on the whole axis, *Journal of Nonlinear Sciences and Applications*, 9 (2016), no:6, 4257-4262, 2016.
15. **Aygar Y.**, Bohner M., Spectral analysis of a matrix-valued quantum-difference operator, *Dynamic Systems and Applications*, 25:1-9, 2016.
14. **Aygar Y.**, Quadratic eigenparameter-dependent quantum difference equations, *Turkish Journal of Mathematics*, 40: 445-452, 2016.
13. **Aygar Y.**, Investigation of spectral analysis of matrix quantum difference equations with spectral singularities, *Hacettepe Journal of Mathematics and Statistics*, 45(4): 1-7, 2016.
12. **Aygar Y.**, Bohner M., A Polynomial-Type Jost solution and spectral properties of a self-adjoint quantum-difference operator, *Complex Analysis and Operator Theory*, 10(6): 1171-1180, 2016.
11. **Aygar Y.**, On the Jost solution and its properties of quantum difference operators with hyperbolic eigenparameter, 3th International Conference on Industrial Engineering and Applications (ICIEA), *MATEC Web of Conferences*, 2016, 68, 16005, 2016.
10. **Aygar Y.**, Principal vectors of second-order quantum difference equations with boundary conditions dependent on spectral parameter, *Advances in Difference Equations*, 2015:249, 2015.
9. **Aygar Y.**, Bohner M., On the spectrum of eigenparameter-dependent quantum difference equations, *Applied Mathematics & Information Sciences*, 9: 1725-1729, 2015.
8. Cebesoy S., **Aygar Y.**, Bairamov E., Matrix Valued Difference Equations with spectral singularities, *International Journal of Mathematical, Computational, Physical, Electrical and Computer Engineering*, 9 (11) 579-582, 2015.
7. **Aygar Y.**, Olgun M., Investigation of the spectrum and the Jost solutions of discrete Dirac system on the whole axis, *Journal of Inequalities and Applications*, 2014:73, 2014.
6. **Aygar Y.**, Olgun M., Koprubasi T., Principal functions of non-selfadjoint discrete Dirac equations with spectral parameter in boundary conditions, *Abstract and Applied Analysis*, Volume 2012, Article ID 924628, 15 pages, 2012.
5. **Aygar Y.**, Bairamov E., Jost Solution and the Spectral Properties of the Matrix-Valued difference operators, *Applied Mathematics and Computation*, 218: 9676-9681, 2012.
4. Olgun M., Koprubasi T., **Aygar Y.**, Principal functions of non-selfadjoint difference operator with spectral parameter in boundary conditions, *Abstract and Applied Analysis*, Volume 2011, Article ID 608329, 10 pages, 2011.
3. **Aygar Y.**, Bairamov E., Properties of the two-dimensional exponential integral functions, *Journal of Mathematical Chemistry*, 49: 1014-1025, 2011.
2. Bairamov E., **Aygar Y.**, Koprubasi T., The Spectrum of the eigenparameter dependent discrete Sturm--Liouville equations, *Journal of Computational and Applied Mathematics*, 235: 4519-4523, 2011.

1. **Aygar Y.**, Bairamov E., **Aygar Y.**, Olgun M., Jost Solution and the spectrum of the discrete Dirac systems, *Boundary Value Problems*, Volume 2010, Article ID 306571, 11 pages, 2010.

### **Kitap Bölümü:**

**Aygar Y.**, Olgun M., *Principal Vectors of Matrix-valued Difference Operators; Computational Analysis*, Springer, volume 155 chp. 17, 2016.

### **Bilimsel Toplantılar:**

48. Öznur Güler Başak, **Aygar Yelda**, A Study of scattering theory of eigenparameter-dependent impulsive Sturm-Liouville equation with matrix coefficients. The 3rd International Conference on Applied Mathematics in Engineering (ICAME'24), 26-28 June, Ayvalık, Balıkesir, Turkey, 2024.
47. **Aygar Yelda**, Öznur G. Başak, Spectral analysis of a difference equation with interface conditions and hyperbolic eigenparameter on the whole axis. *Functional Analysis, Approximation Theory and Numerical Analysis (FAATNA20>22)*, July 5-8, Matera-Italy, 2022.
46. **Aygar Yelda**, Öznur G. Başak, Matrix difference operator with interface condition. 1st International Conference on Innovative Academic Studies (ICIAS), September 10-13, Konya, Turkey, 2022.
45. Öznur G. Başak, **Aygar Yelda**, A Study of the scattering properties of eigenparameter-dependent matrix difference operator with transmission condition. 6th International Conference of Mathematical Sciences (ICMS 2022), July 20-24, Istanbul-Turkey, 2022.
44. **Aygar Yelda**, Öznur G. Başak, Spectral and scattering properties of eigenparameter-dependent discrete Dirac equation with point interaction. *International Symposium on Applied Mathematics and Engineering (ISAME2022)*, January 21-23, Istanbul-Turkey, 2022.
43. Özbey G. Gülçehre, **Aygar Yelda**, Öznur G. Başak, Discrete Sturm-Liouville equation with point interaction. *International Conference on Applied Mathematics in Engineering (ICAME)*, 1-3 September, Balıkesir-Turkey, 2021.
42. Öznur G. Başak, Bairamov Elgiz, **Aygar Yelda**, Impulsive discrete Dirac equation with spectral parameter. *International Conference on Applied Mathematics in Engineering (ICAME)*, 1-3 September, Balıkesir-Turkey, 2021.
41. **Aygar Yelda**, Polinomial Çözüme sahip self-adjoint matris katsayılı fark denkleminin spektral analizi. 14. Matematik Sempozyumu, 2015, Niğde Üniversitesi, Matematik Bölümü, Niğde-Türkiye, 14-16 Mayıs 2015. (Özet bildiri)
40. **Aygar Yelda**, Bairamov Elgiz and Karslioglu Dilara, Scattering Analysis of discrete Schrödinger equations with impulsive conditions", 7th International Conference on Applied Analysis and Mathematical Modelling (ICAAMM18), 20-24 June, Istanbul-Turkey, 2018. (Özet bildiri)
39. Bairamov Elgiz, **Aygar Yelda** and Oznur Basak, Properties of scattering solutions, scattering functions and spectrum of eigenparameter dependent impulsive Sturm-Liouville equations. 6th International Conference on Control and Optimization with Industrial Applications (COIA 2018), 11-13 July, Baku-Azerbaijan, 2018. (Tam Metin bildiri)
38. **Aygar Yelda**, Bairamov Elgiz and Ozbey Gülçehre, Spectral properties and scattering problems of eigenparameter dependent impulsive Sturm-Liouville equations. 6th International Conference on Control and Optimization with Industrial Applications (COIA 2018), 11-13July, Baku-Azerbaijan, 2018. (Tam Metin bildiri)
37. Cebesoy Serifenur, Bairamov Elgiz and **Aygar Yelda**, Scattering problems of impulsive Sturm-Liouville equations

with matrix coefficients. International Conference on Mathematical Analysis, Differential Equation & Applications (MADEA 8), 17-23 June, Cholpon-Ata-Kirgыз Republic, 2018. (Özet bildiri)

36. Bairamov Elgiz, **Aygar Yelda** and Cebesoy Serifenur, Spectral analysis of the impulsive quadratic pencil of Schrödinger operators with spectral singularities. International Conference on Mathematical Analysis, Differential Equation & Applications (MADEA 8), 17-23 June, Cholpon-Ata-Kirgыз Republic, 2018. (Özet bildiri)

35. **Aygar Yelda**, Bairamov Elgiz and Cebesoy Serifenur, Investigation of spectrum and scattering function of impulsive matrix difference operators. International Conference on Mathematical Analysis, Differential Equation & Applications (MADEA 8), 17-23 June, Cholpon-Ata-Kirgыз Republic, 2018. (Özet bildiri)

34. Bairamov Elgiz, **Aygar Yelda**, and Cebesoy Serifenur, Spectral properties of quadratic pencil of Schrödinger equations with transmission conditions. International Conference on Physics, Mathematics and Statistics (ICPMS 2018), 12-14 May, Shanghai-China, 2018. (Tam metin bildiri)

33. **Aygar Yelda**, Bairamov Elgiz and Cebesoy Serifenur, A study on properties of scattering solutions, scattering function of an impulsive difference equation with matrix coefficients. International Conference on Physics, Mathematics and Statistics (ICPMS 2018), 12-14 May, Shanghai-China, 2018. (Özet Bildiri)

32. **Aygar Yelda**, About the spectral analysis of  $q$ -difference equations and operators. Çankaya Üniversitesi Matematik Bilgisayar Bölümü, 25 Kasım 2016. (Davetli Konuşmacı)

31. **Aygar Yelda**, Bairamov Elgiz and Özbey G. Gülçehre, On the spectral analysis of a discrete Sturm-Liouville equation. Computational Methods and Function Theory (CMFT2017), 10-15 July, Lublin-Poland, 2017. (Özet bildiri)

30. **Aygar Yelda** and Yardımcı Şeyhmus, Spectral analysis of a selfadjoint difference equation in quantum calculus. Computational Methods and Function Theory (CMFT2017), 10-15 July, Lublin-Poland, 2017. (Poster bildiri)

29. **Aygar Yelda** and Bayram Elgiz, Spectral analysis of the quadratic pencil of Schrödinger equation with a general boundary condition. International Workshop on Mathematical Methods in Engineering (MME2017), 27-29 April, Ankara-Turkey, 2017. (Özet bildiri)

28. Bayram Elgiz and **Aygar Yelda**, Scattering solution of impulsive Sturm-Liouville equation in quantum calculus. International Workshop on Mathematical Methods in Engineering (MME2017), 27-29 April, Ankara-Turkey, 2017. (Özet bildiri)

27. Bayram Elgiz, **Aygar Yelda** and Karshoglu Dilara, Scattering solutions of impulsive discrete Sturm-Liouville equations. International Workshop on Mathematical Methods in Engineering (MME2017), 27-29 April, Ankara-Turkey, 2017. (Özet bildiri)

26. Bayram Elgiz, **Aygar Yelda** and Eren Basak, Scattering solutions of impulsive Sturm-Liouville equations. International Workshop on Mathematical Methods in Engineering (MME2017), 27-29 April, Ankara-Turkey, 2017. (Özet bildiri)

25. Bayram Elgiz, **Aygar Yelda** and Ozbey G. Gulcehre, The resolvent of discrete Sturm-Liouville equation with eigenparameter in boundary condition. International Workshop on Mathematical Methods in Engineering (MME2017), 27-29 April, Ankara-Turkey, 2017.

(Özet bildiri)

24. Bayram Elgiz, **Aygar Yelda** and Solmaz Seyda, Discrete Dirac system with a point Interaction. International Workshop on Mathematical Methods in Engineering (MME2017), 27-29 April, Ankara-Turkey, 2017. (Özet bildiri)

23. **Aygar Yelda**, Bairamov Elgiz, Spectral properties of a selfadjoint quantum difference equation with matrix coefficient. International Congress on Mathematics and Mathematics Education (ICMME2017), 11-13 May, Sanlıurfa-Turkey, 2017. (Özet bildiri)

22. **Aygar Yelda**, Spectral properties of a selfadjoint matrix quantum difference equation. The 24th Conference on Applied and Industrial Mathematics (CAIM 2016), 15-18 September, Craiova-Romai, 2016. (Özet bildiri)
21. **Aygar Yelda**, Spectral theory of a quantum difference equation with hyperbolic eigenparameter. International Congress on Fundamental and Applied Sciences (ICFAS2016), 22-26 August, Istanbul-Turkey, 2016. (Özet bildiri)
20. **Aygar Yelda** and Yardımcı Şeyhmus, Studying on spectral analysis of a nonselfadjoint matrix quantum difference equation. International Congress on Fundamental and Applied Sciences (ICFAS2016), 22-26 August, Istanbul-Turkey, 2016. (Özet bildiri)
19. **Aygar Yelda**, Spectral properties of a matrix quantum difference equation with spectral singularities. International conference on Applied Mathematics and Analysis (ICAMA 2016) 11-13 July, Ankara-Turkey, 2016. (Özet bildiri)
18. **Aygar Yelda** and Bairamov Elgiz, Jost solution and spectral properties of Dirac system with matrix coefficient. International Conference on Mathematics and Mathematics Education (ICMME-2016), 12-14 May, Elazığ-Turkey, 2016. (Özet bildiri)
17. **Aygar Yelda** and Bairamov Elgiz, Properties of the two-dimensional exponential integral functions. International Conference on Mathematics and Mathematics Education (ICMME-2016), 12-14 May, Elazığ-Turkey, 2016. (Özet bildiri)
16. Bairamov Elgiz, Cebesoy Serifenur and **Aygar Yelda**, Some spectral properties of nonselfadjoint Matrix valued difference operator. International Conference on Advances in Natural and Applied Sciences (ICANAS 2016), 21-23 April, Antalya-Turkey, 2016. (Özet bildiri)
15. **Aygar Yelda**, On the Jost solution and its properties of quantum difference equations with hyperbolic eigenparameter. International Conference on Natural Science and Applied Sciences (ICNSAM 2016), 7-9 April, Dubai, 2016. (Tam metin bildiri)
14. Cebesoy Serifenur, **Aygar Yelda** and Bairamov Elgiz, Matrix-valued difference equations with spectral singularities. 17th International Conference on Applied Mathematics and Approximation Theory (ICAMAT 2015), 9-10 November, Venice-Italy, 2015. (Tam metin bildiri)
13. Cebesoy Serifenur, Bairamov Elgiz, **Aygar Yelda**, Matrix-valued difference operators with polynomial type Jost solutions on the whole axis. International Conference on Pure and Applied Mathematics (ICPAM 2015), 28-30 August Van-Turkey, 2015. (Özet bildiri)
12. Cebesoy Serifenur, Bairamov Elgiz, **Aygar Yelda**, Some spectral properties of second-order matrix difference equations on the whole axis. International Conference On Recent Advances In Pure And Applied Mathematics, (ICRAPAM 2015), Istanbul, Turkey, 3-6 June, 2015. (Özet bildiri)
11. **Aygar Yelda**, Bohner Martin, Spectral analysis of a matrix quantum-difference equation. International Conference On Recent Advances In Pure And Applied Mathematics, (ICRAPAM 2015), Istanbul, Turkey, 3-6 June, 2015. (Özet bildiri)
10. **Aygar Yelda**, Olgun Murat, Principal vectors of matrix-valued difference operators. 3rd International Conference on Applied Mathematics & Approximation Theory (AMAT 2015), Ankara-Turkey, May 28-31, 2015. (Özet bildiri)
9. **Aygar Yelda**, On the spectrum of eigenparameter-dependent quantum difference equations. Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of S&T, September 10, Rolla-USA, 2014. (Davetli konuşmacı)
8. **Aygar Yelda**, Spectral analysis of a matrix-valued quantum difference operator. Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of S&T, April 16, Rolla-USA, 2014. (Davetli konuşmacı)

7. **Aygar Yelda**, A Polynomial-type Jost solution and spectral properties of a selfadjoint  $q$ -difference operator . Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of S&T, January 29, Rolla-USA, 2014. (Davetli konuşmacı)
6. **Aygar Yelda**, Jost solution and spectral properties of selfadjoint matrix-valued difference operators. Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of S&T, November 13, Rolla-USA, 2013. (Davetli konuşmacı)
5. Cebesoy Serifenur, **Yelda Aygar**, A study on the Jost solution and the spectral properties of the matrix-valued difference operators. 2. International Eurasian Conference on Mathematics Sciences and Applications. (IECMSA-2013), 26-29 August, Sarajevo Bosnia and Hercegovina, 2013. (Özet bildiri)
4. **Aygar Yelda**, Olgun Murat, Investigation of the spectrum and the Jost solutions of discrete Dirac system on the whole axis. International Conference on Applied Analysis and Mathematical Modelling (ICAAMM 2013), 2-5 June, İstanbul-Turkey, 2013. (Özet bildiri)
3. **Aygar Yelda**, Uniform convergence of the two-dimensional exponential integral functions. Joint Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies-Liege/Belgian, 6-8 June, 2012. (Poster bildiri)
2. Olgun Murat and **Aygar Yelda**, Spectral analysis of non-selfadjoint matrix Sturm-Liouville equations. The 4th Congress of the Turkic World Mathematical Society (TWMS), 1-3 July, Baku-Azerbaijan, 2011. (Özet bildiri)
1. Olgun Murat and **Aygar Yelda**, Jost solution and the spectrum of the discrete Dirac systems. International Conference on Applied Analysis and Algebra (ICAA 2011), June 29 - July 3 İstanbul-Turkey, 2011. (Özet bildiri)

## Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2008 - 2013

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 2006 - 2008

Undergraduate, Ankara University, Fen Fakültesi, Matematik Bölümü, Turkey 2001 - 2006

## Dissertations

Doctorate, Matris katsayılı fark denklemleri, Ankara University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2013

Postgraduate, Sonsuz jacobı matrisleri için spektral eşitsizlikler, Ankara University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2008

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## Academic Titles / Tasks

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Research Assistant, Ankara University, Fen Fakültesi, Matematik Bölümü, 2007 - 2013

## Academic and Administrative Experience

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## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, June, 2022  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, June, 2022

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A study on Sobolev orthogonal polynomials on a triangle**  
AKTAŞ KARAMAN R., Lekesiz E. G., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
NUMERICAL ALGORITHMS, vol.97, no.2, pp.915-944, 2024 (SCI-Expanded)
- II. **Some spectral problems of dissipative  $q$ -Sturm–Liouville operators in limit-point case for  $q > 1$**   
Allahverdiev B. P., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Filomat, vol.38, no.22, pp.7693-7705, 2024 (SCI-Expanded)
- III. **Impulsive discrete Dirac equation with spectral parameter**  
ÖZNUR G. B., BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Filomat, vol.38, no.22, pp.7673-7682, 2024 (SCI-Expanded)
- IV. **A Study of the scattering analysis of the multiplicative Sturm-Liouville problem**  
ÖZNUR G. B., ÖZBEY G. G., AYGAR KÜÇÜKEVCİLİOĞLU Y., AKTAŞ KARAMAN R.  
TURKISH JOURNAL OF MATHEMATICS, no.3, 2024 (SCI-Expanded)
- V. **Scattering problems of impulsive Schrodinger equations with matrix coefficients**  
Cebesoy S., Bairamov E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
RICERCHE DI MATEMATICA, vol.72, no.1, pp.399-415, 2023 (SCI-Expanded)
- VI. **An examination of boundary value transmission problem with quadratic spectral parameter**  
ÖZNUR G. B., AYGAR KÜÇÜKEVCİLİOĞLU Y., ARAL N. D.  
QUAESTIONES MATHEMATICAE, vol.46, no.5, pp.871-885, 2023 (SCI-Expanded)
- VII. **Spectral analysis of the impulsive quadratic pencil of Schrodinger operators with spectral singularities**  
Bairamov E., AYGAR KÜÇÜKEVCİLİOĞLU Y., Cebesoy S.  
COMPLEX VARIABLES AND ELLIPTIC EQUATIONS, vol.68, no.3, pp.430-444, 2023 (SCI-Expanded)
- VIII. **Scattering solutions and scattering function of a Klein-Gordon  $s$ -wave equation with jump conditions**  
Taş H., AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
Turkish Journal of Mathematics, vol.47, no.2, pp.721-731, 2023 (SCI-Expanded)
- IX. **Discrete impulsive Sturm-Liouville equation with hyperbolic eigenparameter**  
KÖPRÜBAŞI T., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
TURKISH JOURNAL OF MATHEMATICS, vol.46, no.1, pp.387-396, 2022 (SCI-Expanded)
- X. **Scattering analysis of a quantum impulsive boundary value problem with spectral parameter**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., Özbey G. G.



HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.51, no.1, pp.142-155, 2022 (SCI-Expanded)

- XI. **A Discrete Boundary Value Problem with Point Interaction**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., Koprubasi T.  
FILOMAT, vol.36, no.18, pp.6279-6288, 2022 (SCI-Expanded)
- XII. **SERIES EXPANSION, ASYMPTOTIC BEHAVIOR AND COMPUTATION OF THE VALUES OF THE SCHWARZSCHILD-MILNE INTEGRALS ARISING IN A RADIATIVE TRANSFER**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., Bairamov E.  
APPLIED AND COMPUTATIONAL MATHEMATICS, vol.20, no.2, pp.236-246, 2021 (SCI-Expanded)
- XIII. **On the spectral and scattering properties of eigenparameter dependent discrete impulsive Sturm-Liouville equations**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., Bairamov E., Ozbey G. G.  
TURKISH JOURNAL OF MATHEMATICS, vol.45, no.2, pp.988-1000, 2021 (SCI-Expanded)
- XIV. **Scattering Properties of Eigenparameter-Dependent Impulsive Sturm-Liouville Equations**  
Bairamov E., AYGAR KÜÇÜKEVCİLİOĞLU Y., Oznur G. B.  
BULLETIN OF THE MALAYSIAN MATHEMATICAL SCIENCES SOCIETY, vol.43, no.3, pp.2769-2781, 2020 (SCI-Expanded)
- XV. **Scattering Theory of Impulsive Sturm-Liouville Equation in Quantum Calculus**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
BULLETIN OF THE MALAYSIAN MATHEMATICAL SCIENCES SOCIETY, vol.42, no.6, pp.3247-3259, 2019 (SCI-Expanded)
- XVI. **Investigation of Spectrum and Scattering Function of Impulsive Matrix Difference Operators**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., Cebesoy S.  
FILOMAT, vol.33, no.5, pp.1301-1312, 2019 (SCI-Expanded)
- XVII. **A RESEARCH ON SPECTRAL ANALYSIS OF A MATRIX QUANTUM DIFFERENCE EQUATIONS WITH SPECTRAL SINGULARITIES**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
QUAESTIONES MATHEMATICAE, vol.40, no.2, pp.245-249, 2017 (SCI-Expanded)
- XVIII. **Scattering Theory of Impulsive Sturm-Liouville Equations**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., Eren B.  
FILOMAT, vol.31, no.17, pp.5401-5409, 2017 (SCI-Expanded)
- XIX. **A note on spectral properties of a Dirac system with matrix coefficient**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E., YARDIMCI Ş.  
JOURNAL OF NONLINEAR SCIENCES AND APPLICATIONS, vol.10, no.4, pp.1459-1469, 2017 (SCI-Expanded)
- XX. **Scattering Analysis and Spectrum of Discrete Schrodinger Equations with Transmission Conditions**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., Karslioglu D.  
FILOMAT, vol.31, no.17, pp.5391-5399, 2017 (SCI-Expanded)
- XXI. **Investigation of spectral analysis of matrix quantum difference equations with spectral singularities**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.45, no.4, pp.999-1005, 2016 (SCI-Expanded)
- XXII. **A Polynomial-Type Jost Solution and Spectral Properties of a Self-Adjoint Quantum-Difference Operator**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., Bohner M.  
COMPLEX ANALYSIS AND OPERATOR THEORY, vol.10, no.6, pp.1171-1180, 2016 (SCI-Expanded)
- XXIII. **SPECTRAL ANALYSIS OF A MATRIX-VALUED QUANTUM-DIFFERENCE OPERATOR**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., Bohner M. J.  
DYNAMIC SYSTEMS AND APPLICATIONS, vol.25, no.1-2, pp.29-37, 2016 (SCI-Expanded)
- XXIV. **Spectral analysis of a selfadjoint matrix-valued discrete operator on the whole axis**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., Cebesoy S.  
JOURNAL OF NONLINEAR SCIENCES AND APPLICATIONS, vol.9, no.6, pp.4257-4262, 2016 (SCI-Expanded)
- XXV. **Quadratic eigenparameter-dependent quantum difference equations**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.

- TURKISH JOURNAL OF MATHEMATICS, vol.40, no.2, pp.445-452, 2016 (SCI-Expanded)
- XXVI. **Principal vectors of second-order quantum difference equations with boundary conditions dependent on spectral parameter**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
ADVANCES IN DIFFERENCE EQUATIONS, vol.2015, 2015 (SCI-Expanded)
- XXVII. **Investigation of the spectrum and the Jost solutions of discrete Dirac system on the whole axis**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., OLGUN M.  
JOURNAL OF INEQUALITIES AND APPLICATIONS, vol.2014, 2014 (SCI-Expanded)
- XXVIII. **Principal Functions of Nonselfadjoint Discrete Dirac Equations with Spectral Parameter in Boundary Conditions**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., OLGUN M., KÖPRÜBAŞI T.  
ABSTRACT AND APPLIED ANALYSIS, vol.2012, 2012 (SCI-Expanded)
- XXIX. **Jost solution and the spectral properties of the matrix-valued difference operators**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
APPLIED MATHEMATICS AND COMPUTATION, vol.218, no.19, pp.9676-9681, 2012 (SCI-Expanded)
- XXX. **Principal Functions of Non-Selfadjoint Difference Operator with Spectral Parameter in Boundary Conditions**  
OLGUN M., Koprubasi T., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
ABSTRACT AND APPLIED ANALYSIS, vol.2011, 2011 (SCI-Expanded)
- XXXI. **The spectrum of eigenparameter-dependent discrete Sturm-Liouville equations**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., Koprubasi T.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.235, no.16, pp.4519-4523, 2011 (SCI-Expanded)
- XXXII. **Properties of the two-dimensional exponential integral functions**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
JOURNAL OF MATHEMATICAL CHEMISTRY, vol.49, no.5, pp.1014-1025, 2011 (SCI-Expanded)
- XXXIII. **Jost Solution and the Spectrum of the Discrete Dirac Systems**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., OLGUN M.  
BOUNDARY VALUE PROBLEMS, vol.2010, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Some properties of Bessel functions in multiplicative calculus**  
ÖZBEY G. G., ÖZNUR G. B., AYGAR KÜÇÜKEVCİLİOĞLU Y., Karaman R. A.  
Rendiconti del Circolo Matematico di Palermo, vol.74, no.1, 2025 (ESCI)
- II. **Discrete Sturm-Liouville equations with point interaction**  
ÖZBEY G. G., AYGAR KÜÇÜKEVCİLİOĞLU Y., ÖZNUR G. B.  
Journal of Analysis, vol.32, no.3, pp.1725-1737, 2024 (ESCI)
- III. **Miscellaneous properties of Sturm-Liouville problems in multiplicative calculus**  
Öznur G. B., Özbey G. G., Aygar Küçükevçilioğlu Y., Aktaş Karaman R.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.72, no.4, pp.1141-1154, 2023 (ESCI)
- IV. **Quantum Difference Problem with Point Interaction**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., ÖZBEY G. G., ÖZNUR G. B.  
Konuralp Journal of Mathematics, vol.11, no.2, pp.218-228, 2023 (Scopus)
- V. **SOME SPECTRAL AND SCATTERING PROPERTIES OF GENERALIZED EIGENPARAMETER DEPENDENT DISCRETE TRANSMISSION STURM-LIOUVILLE EQUATION**  
Özbey G. G., Öznur G. B., Aygar Küçükevçilioğlu Y., Köprübaşı T.  
HONAM MATHEMATICAL JOURNAL, vol.45, pp.457-470, 2023 (ESCI)
- VI. **Spectral Analysis of A Difference Equation With Interface Conditions And Hyperbolic Eigenparameter on The Whole Axis**

ÖZNUR G. B., AYGAR KÜÇÜKEVCİLİOĞLU Y.

Note di Matematica, vol.43, no.1, pp.67-80, 2023 (ESCI)

VII. **Spectral Properties Of A Discrete Sturm-Liouville Equation**

AYGAR KÜÇÜKEVCİLİOĞLU Y., Ozbey G. G.

APPLIED MATHEMATICS E-NOTES, vol.22, pp.335-344, 2022 (ESCI)

VIII. **MATRIX DIFFERENCE EQUATIONS WITH JUMP CONDITIONS AND HYPERBOLIC EIGENPARAMETER**

Aygar Y., Oznur G. B.

ACTA MATHEMATICA UNIVERSITATIS COMENIANAE, vol.91, no.2, pp.149-159, 2022 (ESCI)

IX. **The Effects of Hyperbolic Eigenparameter on Spectral Analysis of a Quantum Difference Equations**

AYGAR KÜÇÜKEVCİLİOĞLU Y.

MALAYSIAN JOURNAL OF MATHEMATICAL SCIENCES, vol.11, no.3, pp.317-330, 2017 (ESCI)

X. **Matrix Valued Difference Equations with Spectral Singularities**

Cebesoy Erdal Ş., Aygar Küçükkevcilioğlu Y., Bayram E.

World Academy of Science, Engineering and Technology, International Journal of Mathematical, Computational, Physical, Electrical and Computer Engineering, vol.9, no.11, pp.658-661, 2015 (Peer-Reviewed Journal)

XI. **On the Spectrum of eigenparameter-dependent quantum difference equations**

Aygar Küçükkevcilioğlu Y., Bohner M.

APPLIED MATHEMATICS AND INFORMATION SCIENCES, vol.9, no.4, pp.1725-1729, 2015 (Scopus)

## Books

I. **Spectral properties and scattering problems of eigenparameter dependent impulsive Sturm-Liouville Equations**

AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E., ÖZBEY G. G.

in: PROCEEDINGS OF THE 6TH INTERNATIONAL CONFERENCE ON CONTROL AND OPTIMIZATION WITH INDUSTRIAL APPLICATIONS, VOL I, , Editor, Minist Transport Commun & High Technologies Republ Azerbaijan; Baku State Univ, Inst Appl Math, Baku, pp.113-115, 2018

II. **Principal Vectors of Matrix-Valued Difference Operators**

Aygar Küçükkevcilioğlu Y., Olgun M.

in: COMPUTATIONAL ANALYSIS, Springer Proceedings in Mathematics & Statistics, Anastassiou,GA (Anastassiou,GA) ; Duman,O (Duman,O), Editor, Springer, London/Berlin , Geneve, pp.247-257, 2016

## Refereed Congress / Symposium Publications in Proceedings

I. **A Study of scattering theory of eigenparameter-dependent impulsive Sturm-Liouville equation with matrix coefficients**

Aygar Küçükkevcilioğlu Y.

3rd International Conference on Applied Mathematics in Engineering (ICAME'24), Balıkesir, Turkey, 26 June - 28 November 2024, pp.149

II. **Matrix difference operator with interface condition**

AYGAR KÜÇÜKEVCİLİOĞLU Y., ÖZNUR G. B.

1st International Conference on Innovative Academic Studies (ICIAS), Konya, Turkey, 10 - 13 September 2022

III. **A Study of the scattering properties of eigenparameter-dependent matrix difference operator with transmission condition**

ÖZNUR G. B., AYGAR KÜÇÜKEVCİLİOĞLU Y.

6th International Conference of Mathematical Sciences (ICMS 2022), İstanbul, Turkey, 20 - 24 July 2022

IV. **Spectral analysis of a difference equation with interface conditions and hyperbolic eigenparameter on the whole axis**

AYGAR KÜÇÜKEVCİLİOĞLU Y., ÖZNUR G. B.

Functional Analysis, Approximation Theory and Numerical Analysis (FAATNA2022), Matera, Italy, 5 - 08 July 2022

- V. **Spectral and scattering properties of eigenparameter-dependent discrete Dirac equation with point interaction**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., ÖZNUR G. B.  
International Symposium on Applied Mathematics and Engineering (ISAME2022), İstanbul, Turkey, 21 - 23 January 2022
- VI. **Discrete Sturm-Liouville equation with point interaction**  
ÖZBEY G. G., AYGAR KÜÇÜKEVCİLİOĞLU Y., ÖZNUR G. B.  
International Conference on Applied Mathematics in Engineering (ICAME), Balıkesir, Turkey, 1 - 03 September 2021
- VII. **Impulsive discrete Dirac equation with spectral parameter**  
ÖZNUR G. B., BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
International Conference on Applied Mathematics in Engineering (ICAME), Balıkesir, Turkey, 1 - 03 September 2021
- VIII. **Spectral properties of quadratic pencil of Schrödinger equations with transmission conditions**  
Bairamov E., Aygar Y., Cebesoy S.  
1st International Conference on Physics, Mathematics and Statistics, ICPMS 2018, Shanghai, China, 12 - 14 May 2018, vol.1053
- IX. **Properties of scattering solutions, scattering functions and spectrum of eigenparameter dependent impulsive Sturm-Liouville equations**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., eren b.  
6th International Conference on Control and Optimization with Industrial Applications (COIA 2018), 11 - 13 July 2018
- X. **Spectral properties and scattering problems of eigenparameter dependent impulsive Sturm-Liouville equations**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E., özbey g. g.  
6th International Conference on Control and Optimization with Industrial Applications (COIA 2018), 11 - 13 July 2018
- XI. **Scattering analysis of discrete Schrödinger equations with impulsive conditions**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E., KARSLIOĞLU D.  
7th International Conference on Applied Analysis and Mathematical Modelling (ICAAMM18), İstanbul, Turkey, 20 - 24 June 2018
- XII. **Investigation of spectrum and scattering function of impulsive matrix difference operators**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E., CEBESÖY Ş.  
International Conference on Mathematical Analysis, Differential Equation Applications (MADEA 8), 17 - 23 June 2018
- XIII. **Scattering problems of impulsive Sturm-Liouville equations with matrix coefficients**  
CEBESÖY Ş., BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
International Conference on Mathematical Analysis, Differential Equation Applications (MADEA 8), Cholpon-Ata-Kirgыз Republic, 17 - 23 June 2018
- XIV. **Spectral analysis of the impulsive quadratic pencil of Schrödinger operators with spectral singularities**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., CEBESÖY Ş.  
International Conference on Mathematical Analysis, Differential Equation Applications (MADEA 8), 17 - 23 June 2018
- XV. **SPECTRAL PROPERTIES AND SCATTERING PROBLEMS OF EIGENPARAMETER DEPENDENT DISCRETE IMPULSIVE STURM-LIOUVILLE EQUATIONS**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E., Özbey G.  
6th International Conference on Control and Optimization with Industrial Applications (COIA), Baku, Azerbaijan, 11 - 13 July 2018, pp.113-115

- XVI. **On the spectral analysis of a discrete Sturm-Liouville equation**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E., özbey g. g.  
 Computational Methods and Function Theory (CMFT2017), 10 - 15 July 2017
- XVII. **Spectral Analysis of a self-adjoint difference equation in quantum calculus**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y., YARDIMCI Ş.  
 Computational Methods and Function Theory, 10 - 15 July 2017
- XVIII. **Spectral Analysis of the Quadratic Pencil of Schrödinger Equation with a General Boundary Condition**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
 International Workshop on Mathematical Methods in Engineering (MME2017), 27 - 29 April 2017
- XIX. **Discrete Dirac system with a point Interaction**  
 BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., solmaz ş.  
 International Workshop on Mathematical Methods in Engineering (MME2017), 27 - 29 April 2017
- XX. **Scattering solutions of Impulsive Sturm-Liouville equations**  
 BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., eren b.  
 International Workshop on Mathematical Methods in Engineering (MME2017), 27 - 29 April 2017
- XXI. **The Resolvent of discrete Sturm-Liouville equation with eigenparameter in boundary condition**  
 BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., özbey g. g.  
 International Workshop on Mathematical Methods in Engineering (MME2017), 27 - 29 April 2017
- XXII. **Scattering solution of Impulsive Sturm-Liouville equation in quantum calculus**  
 BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
 International Workshop on Mathematical Methods in Engineering (MME2017), 27 - 29 April 2017
- XXIII. **Scattering solutions of Impulsive discrete Sturm-Liouville equations**  
 BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., KARSLIOĞLU D.  
 International Workshop on Mathematical Methods in Engineering (MME2017), 27 - 29 April 2017
- XXIV. **Spectral properties of a selfadjoint quantum difference equation with matrix coefficient**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
 International Congress on Mathematics and Mathematics Education (ICMME2017), 11 - 13 May 2017
- XXV. **About the spectral analysis of q-difference equations and operators**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y.  
 Çankaya Üniversitesi Matematik Bilgisayar Bölümü, 25 November 2016
- XXVI. **Spectral properties of a selfadjoint matrix quantum difference equation**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y.  
 The 24th Conference on Applied and Industrial Mathematics (CAIM 2016), 15 - 18 September 2016
- XXVII. **Spectral theory of a quantum difference equation with hyperbolic eigenparameter**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y.  
 International Congress on Fundamental and Applied Sciences (ICFAS2016), 22 - 26 August 2016
- XXVIII. **Studying on spectral analysis of a nonselfadjoint matrix quantum difference equation**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y., YARDIMCI Ş.  
 International Congress on Fundamental and Applied Sciences (ICFAS2016), 22 - 26 August 2016
- XXIX. **Studyin on spectral analiysis of nonselfadjoint matrix quantum difference equation**  
 YARDIMCI Ş., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
 Yıldız Üniversitesi International Congress on Fundamental and Applied Sciences-2016, 22 - 26 August 2016
- XXX. **Spectral properties of a matrix quantum difference equation with spectral singularities**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y.  
 International conference on Applied Mathematics and Analysis (ICAMA 2016), 11 - 13 July 2016
- XXXI. **Jost Solution and spectral properties of Dirac system with matrix coefficient**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
 International Conference on Mathematics and Mathematics Education (ICMME-2016), 12 - 14 May 2016
- XXXII. **Properties of the two dimensional exponential integral functions**  
 AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.

- International Conference on Mathematics and Mathematics Education (ICMME-2016), 12 - 14 May 2016
- XXXIII. **Some spectral properties of Non selfadjoint Matrix Valued Difference Operator**  
BAYRAM E., CEBESÖY Ş., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
International Conference on Advances in Natural and Applied Sciences (ICANAS 2016), 21 - 23 April 2016
- XXXIV. **On the Jost Solution and Its Properties of Quantum Difference Equations with Hyperbolic Eigenparameter**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
3th International Conference on Industrial Engineering and Applications (ICIEA), Hong Kong, PEOPLES R CHINA, 28 - 30 April 2016, vol.68
- XXXV. **Principal Vectors of Matrix-Valued Difference Operators**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., OLGUN M.  
3rd International Conference on Applied Mathematics and Approximation Theory (AMAT), Ankara, Turkey, 28 - 31 May 2015, vol.155, pp.247-257
- XXXVI. **Matrix Valued Difference Equations with spectral singularities**  
CEBESÖY Ş., AYGAR KÜÇÜKEVCİLİOĞLU Y., BAYRAM E.  
17th international Conference on Applied Mathematics and Approximation Theory (ICAMAT 2015)-Venice, 9 - 10 October 2015
- XXXVII. **Matrixs valued difference operators with polynomial type jost solutions on the whole axis**  
CEBESÖY Ş., BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
ICPAM 2015, 25 - 28 August 2015
- XXXVIII. **Matrix Valued Difference Operators with Polynomial Type Jost Solutions on yhe whole axis**  
CEBESÖY Ş., BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
International Conference on Pure and Applied Mathematics (ICPAM 2015), Van, Turkey, 25 - 28 August 2015
- XXXIX. **Some spectral properties of second order matrixs difference equations**  
CEBESÖY Ş., BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
ICRAPAM 2015, 3 - 29 June 2015
- XL. **Some Spectral Properties of Second Order Matrix Difference Equations on the Whole Axis**  
CEBESÖY Ş., BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
International Conference On Recent Advances In Pure And Applied Mathematics, (ICRAPAM 2015)-, İstanbul, Turkey, 3 - 06 June 2015
- XLI. **Spectral Analysis of a Matrix Quantum Difference Equation**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., Martin B.  
International Conference On Recent Advances In Pure And Applied Mathematics, (ICRAPAM 2015)-Istanbul, Turkey, İstanbul, Turkey, 3 - 06 June 2015
- XLII. **Polynomial Çözümüne sahip self adjoint matris katsayılı fark denkleminin spektral analizi**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
14. Mathematic Symposium, 2015, Niğde Üniversitesi, Matematik Bölümü, Turkey, 14 - 16 May 2015
- XLIII. **On the spectrum of eigenparameter dependent quantum difference equations**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of ST, United States Of America, 10 September 2014
- XLIV. **Spectral analysis of a matrix valued quantum difference operator**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of ST, United States Of America, 16 April 2014
- XLV. **A polynomial type Jost solution and spectral properties of a self adjoint q difference operators**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of ST, United States Of America, 29 January 2014
- XLVI. **Jost solution and spectral properties of selfadjoint matrix valued difference operators**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.

Time Scales Seminar of the Department of Mathematics and Statistics at the Missouri University of ST, United States Of America, 13 November 2013

- XLVII. **A study on the Jost solution and the spectral properties of the matrix valued difference operators**  
CEBESOY Ş., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
2. International Eurasian Conference on Mathematics Sciences and Applications (IECMSA-2013), 26 - 29 August 2013
- XLVIII. **Investigation of the spectrum and the Jost solutions of discrete Dirac system on the whole axis**  
BAYRAM E., AYGAR KÜÇÜKEVCİLİOĞLU Y., OLGUN M.  
International Conference on Applied Analysis and Mathematical Modelling (ICAAMM 2013), 2 - 05 June 2013
- XLIX. **Uniform Convergence of the Two dimensional Exponential Integral Functions**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
1st Joint Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies, 6 - 08 June 2012
- L. **Spectral analysis of non selfadjoint matrix Sturm-Liouville equations**  
OLGUN M., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
IV. Congress of theThe 4th Congress of the Turkc World Mathematical Society ( TWMS), 1 - 03 July 2011
- LI. **Jost solution and the spectrum of the discrete Dirac systems**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., OLGUN M.  
International Conference on Applied Analysis and Algebra, ICAAA 2011, 29 June - 02 July 2011
- LII. **Diskre Dirac Sisteminin Jost Çözümü ve Spektrumu**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Ankara Üniversitesi Matematik Bölümü Haftalık Seminerleri, Turkey, 22 December 2010
- LIII. **Sınır koşulunda spektral parametre bulunan birinci mertebeden non selfadjoint fark denklemleri sisteminin spektral analizi**  
AYGAR KÜÇÜKEVCİLİOĞLU Y., KÖPRÜBAŞI T.  
XXIII. Kayseri Ulusal matematik Sempozyumu, Turkey, 4 - 07 August 2010
- LIV. **Self adjoint Olmayan Matris Katsayılı Sturm Liouville Operatörlerinin Spektral Analizi**  
OLGUN M., AYGAR KÜÇÜKEVCİLİOĞLU Y.  
5. Ankara Matematik Gunleri, Turkey, 3 - 04 June 2010
- LV. **Periyodik ve Yarı periyodik Dirac Operatörleri**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Ankara Üniversitesi Doktora Semineri, Turkey, 10 April 2010
- LVI. **Sonsuz Jacobi Matrisi içeren Denklemlerin Çözümleri**  
AYGAR KÜÇÜKEVCİLİOĞLU Y.  
Yüksek Lisans Semineri Ankara Üniversitesi, Turkey, 28 December 2007

## **Memberships / Tasks in Scientific Organizations**

Matematikçiler Derneği, Member, 2015 - Continues, Turkey

Türk Matematikçiler Derneği, Member, 2015 - Continues, Turkey

• ISDE (International Society of Difference Equations), Member, 2014 - Continues, United States Of America

## **Scientific Refereeing**

DEMONSTRATIO MATHEMATICA, Journal Indexed in SCI-E, November 2022

Fundamental journal of mathematics and applications (Online), Other Indexed Journal, August 2022

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS,  
Journal Indexed in ESCI, July 2022

TURKISH JOURNAL OF MATHEMATICS, SCI Journal, January 2022

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## **Metrics**

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