PROF. DR. ELMAN HASANOGLU

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1. Name: Elman HASANOĞLU

2. Birth Day: 15.04.1948

3. Academic Title : Profesör

4. Education:

DATES	DEGREE	UNIVERSITY	DEPARTMENT
1965-1971	BS	Azerbaijan State University	Mathematics
1971	MS	Azerbaijan State University	Mathematics
1971-1973	Ph.D	Academy of Sciences of Azerbaijan	Mathematics, Functional Analysis
1974-1991	Dr. of Sc.	Charkov State University	Mathematical Physics and Radiophysics

5. Academic Titles

YEAR	TITLE	UNIVERSITY	DEPARTMENT
1971	Researche fellow	Academy of Sciences of Azerbaijan	Institute of Cybernetics
1974	Assoc. Prof.	Academy of Sciences of	Institute of Cybernetics
1992	Full. Prof.	Academy of Sciences of Azerbaijan	Institute of Cybernetics

6. Publications (Resume)

Note: Publications in non public (secret) journals of The Ministry of Defence of former Soviet Union are not included

6. 1. Journal Publications (WOS and SCI-Expanded)

15. A New form of Kakutani Fixed Point Theorem and Intersection Theorem with Applications (with A.P. Farajzadeh, P. Zanganehmehr), Applied and Computational Mathematics, An Intrnational Journal, Volume 20, №3 (pages: 430-435)

14. Asymptotic Solutions of Love Wave Propogation in a Covered Half-Space with Inhomogeneous Inıtial Stresses $G^{\#}$ (with M. Negin), TWMS J. of Applied and Engineering Mathenatics, V.5, No.1
p.p.88-97, 2015

13. A method for calculating profiles of thick lenses (with Polat B. A), Applied and Comput. Mathematics. 3 (2004) No. 1, pp. 23-33.

12. A new theory of complex rays. IMA Journal of Applied Mathematics, 2004, 69(6):521-537.

11. On The Realization of Optical Mappings and Transformation of Amplitudes by Means of an Aspherical "Thick " Lens. (with. B. Polat) , International Journal of Electronics and Communications (AEÜ) vol. 54, No.2, pp.109-113, 2000.

10. Theory of the Focusing of Laser Radiation Into a Transmission Line, Soviet Journal of Communication Tech. and Electronics, vol. 37, No 7, pp. 1 - 8 , 1992.

9. Paraxial Approximation in the Theory of Laser Beam Focusing, Soviet Journal of Com of Communication Tech. and Electronics ,vol. 37, No 7, pp. 1 - 8 , 1992.

8. Concerning Four - Mirror Systems, Soviet Journal of Communication Tech. and Electronics, vol. 36, No 1, pp. 42 - 49, 1991.

7. On Synteze of Two Reflector Antennas - Converter of Amplitude of Plane Waves, Soviet Journal of Communication Tech. and Electronics, vol. 36 , No 7, 1991.

6. On Optical Transformation of coordinates by Aspherical Lenz, Soviet Journal of Communication Tech.and Electronics, vol 36 , No 7, pp. 1991.

5. A class of Optical Image Transformation Produced by Means of Two Reflections, (with Kinber B.Ye.), Soviet Journal of Communication Tech.and Electronics, vol 36, No 7, pp. 67 – 72, 1991.

4. On the Transformation of the non - Homocentrical Waves After Two Reflection, (with Kinber B.Ye.),Soviet Journal of Communication Tech.and Electronics , vol 34, No 1, pp. 67 - 72 , 1989.

3. Reflector Antennas with Anisotrophic Surfaces - Converter of Polarization (with Kinber B.Ye., Vinebrand M.M.),Soviet Journal of Communication Tech.and Electronics, vol 34, No 4, 1989.

2. On the Mathematical Theory of Two Reflector Antennas", Soviet Journal of Communication Tech. and Electronics, vol. 30, No 7,1986.

1. Completeness theorems in Banach space. Functional Analysis and its Applications (with Allahverdiyev J.E.), V.8, No.4, Moscow, 1974 (Rusca).

6. 2. Journal Publications, published in peer-reviewed and indexed international journals (Non SCI-Expanded)
(Not: papers 1-22 are indexed and abstracted by VINITI, the former Soviet Union (currently Russian) Science Citation Organization

23. Inverse Problems for Many Reflector Systems , Turkish Journal of Physics, vol.20, No 4, 1996. (ULAKBİM)

22. On Optical Transformation of Coordinates After Two Reflections, Computer Optics, Moscow
No 3, 1988. (Rusca, VINITI).

20. On the Transformation of Wave Fronts, Proceedings of Academy of Sciences of Azerbaijan No 2 , 1988 (Rusca, VINITI).

19. Method for Calculation Two Reflector Antenna Surfaces, non -sensitive to non - symmetric gravitational deflections (with Tarasov V.B.) Proceedings of Academy of Sciences of Azerbaijan , No 1, 1987 (Rusca,VINITI).

18. On the Inverse Problems in Geometrical Optics, Proc. of Academy of Sciences of Azrbaijan , No 5 , 1987 (Rusca,VINITI).

17. Application of the Theory of B - Splines to Calculation of the Far - Field Pattern of Plane Aperture . II. (with Karasik, Vinebrandt M.M.) Proceedings of Academy of Sciences of Azerbaijan, No 5, 1987. (Rusca,VINITI).

16. Application of the Theory of B - Splines to the Calculation of the Far - Field Pattern of Plane Aperture I.(with Karasik , Vinebrandt M.M.), Proceedings of Academy of Sciences of Azerbaijan, No 4, 1987 (Rusca,VINITI).

15. On the inverse problems in geometrical optics, Proceedings of Academy of Sciences of Azerbaijan, 1987, No 5 (Rusca,VINITI).

14. A method for calculating two reflector antennas, Proceedings of Academy of Sciences of Azerbaijan, 1987, No 5 (Rusca, VINITI).

13. Identification parameters one general control system (with Mahmudov E.N.), Proceedings of Academy of Sciences of Azerbaijan, 1986, No 1 (Rusca, VINITI).

12. Construction lattice systems with variable transmission (with Borovikov V.A., Mirzoyan K.A.) VINITI, No. 1158-85, Moscow, 1985 (Rusca, VINITI).

11. On the modal control theory by eigen values and eigen vectors of the finite dimensional linear systems (with Kazimov S.S.), VINITI No 8041-85, 1985, Moscow, (Rusca, VINITI).

10. Modal control theory with multi dimensional objects (with Kazimov S.S.), Proceedings of Academy of Sciences of Azerbaijan, 1985, No 5 (Rusca, VINITI).

9. Determining impedance structure of the converter of the polarization. In book "Waves and Diffraction" Tbilisi, 1985 (Rusca, VINITI).

8. Optimal two reflector systems, transforming polarization of insident field (with Vinebrand M.M.) Proceedings of Academy of Sciences of Azerbaijan, 1984, No 5 (Rusca, VINITI).

7. On the control theory using digital systems (with Belyanskiy P.V., Maksimov Yu.M.) Proceedings of Academy of Sciences of Azerbaijan, 1983, No 4 (Rusca, VINITI).

6. Compensation of deformation of the mirror systems of radiotelescope by controlling counterreflector, Proceedings of Academy of Sciences of Azerbaijan, 1982, No 5 (Rusca, VINITI).

5. Determining Deformation of the radiotelescope RT-70, Proceedings of Academy of Sciences of Azerbaijan, 1981, No 6 (Rusca, VINITI).

4. On the Mathematical Models of the Reflector Systems of Radiotelescope (with Belyanski P.V., Danilevich A.B.),Proceedings of Academy of Sciences of Azerbaijan No 5, 1980 (Rusca, VINITI).

3. Theorems on completeness of eigenvectors of operators, rationally depending on parameter (with Allahverdiyev J.E.)Proceedings emy of Sciences of Azerbaijan, 1974, No.6, pp.20-32. (Rusca, VINITI).

2. Theorems on completeness of the eigen-and adjoninted vectors of the operator branchs in Banach space.VINITI, No.5366-73, Moscow, pp.1-21 (Rusca, VINITI).

1. On estimating of the resolvent of the operators, rationally depending on the spectral parameter. Proceedings of Academy of Azerbaijan, 1971, No.5-6, pp.23-28 (Rusca, VINITI)

6.3. International Conference Papers

12. Beam tracing theory in Minkowski space ,Electromagnetics in Advanced Applications (ICEAA, 2011), International Conference on Publication Year: 2011 , Page(s): 1440 - 1441 ICEAA -11, September 12-16, Torino, Italy,
Taranan – indexlenen kurum: **IEEE Xplore**

11. On the operator pencils in Banach space, The 20th International Congress of Jangjeon Mathematical Society,August 21-23, Uludağ University, Bursa, Turkey.

10. The ray method and equations with rapidly oscillating solutions, Workshop on Mathematical Methods in Applied Sciences, May 22-23, 2008, Uludağ University, Bursa, Turkey.

9. On Complex Solutions of the Eikonal Equation, IECEA'07, September 17-21, 2007, Torino, Italy. Taranan – indexlenen kurum: **IEEE Xplore**

8. Complex rays in Minkowski Space, Days on Diffraction, May 30 – June 2, 2005, St.Petersburg, Russia.

7. Complex and Real Rays in Three Dimensional Minkowski space Proceedings of Mathematical Methods in Electromagnetic Theory (MMET 2002), Kiyev, 2002 (an invited paper).

6. Determining wave fronts by prespecified focal line. Proceedings of Mathematical Methods in Electromagnetic Theory (MMET 94),Kharkov, 1994.

5. On the Mapping Problem of the Laser Focusing Theory III Azerbaijan - Turkey Mathematical Symposium, Trabzon , Turkey , 1993.

4. On the Transformation of Wave Fronts Arbitrary Configuration After Two Reflection, (with Kinber B.Ye.) In the book Waves and Diffraction, vol. 1, pp. 119 - 123 Moscow 1990 (Rusca).

3. On the Transformation of Plane Waves After Four Reflection. In the book Waves and Diffraction , vol 1, pp. 108 - 111,Moscow ,1990. (Rusca).

2. On Optical Transformation of Coordinates After Two Reflections, Computer Optics, Moscow , No 3, 1988. (Rusca).

1. Determining impedance structure of the converter of the polarization. In book "Waves and Diffraction" Tbilisi, 1985 (Rusca).

7. Invited talks.

All Soviet Union seminar on "Diffraction and Wave Propogatiion" of the Academy of Sciences of former Soviet Union, Moscow, 1983-1990, yearly.

8. Projects:

Projects, carried out with the Ministry of Defence of the former Soviet Union. **8.1**. 1978-1981, Gobelen,
8.2. 1982-1986, Reyestr,
8.3. 1987-1990 Gazoprovod .

9. Awards and Honours

9.1. II. All Azerbaijan Olympiada on Physics 2.Place (1964)
9.2. VI. All Azerbaijan Olympiada on Mathematics 1. Place (1966)
9.3. Lenin Grant (the highest educational grant in the former SU, 1966-71)
9.4 The International N.A.Khijnyak Award For Contribution to Electromagnetic Theory,IEEE AP/MTT/AES/ED/GRS/GRS/NPS/EMB Societe East Ukraine Joint Chapter, International Conference on Electromagnetic Theory, 10-13 September, 2002, Kiyev, Ukrayna

10. Books

10.1 . E.Hasanov , G.Uzgören ."Kombinatorik ve Elemeanter Olasılık Teorisine Giriş", Çağlayan Kitabevi, Istanbul, 1997 (in Turkish)
10.2 E.Hasanov, G. Uzgören, A. Büyükaksoy. "Diferansiyel Denklemler Teorisi", Papatya Yayıncılık, Istanbul, 2002, (in Turkish)
10.3 E.Hasanov, A. Huseyinova. "Diferansiyel denklemler ve uygulamaları" , Papatya Yayıncılık, Istanbul, 2008, (in Turkish)

10.4 E. Hasanoğlu, "Lineer Cebir ve Tensör Hesabı", 2021, Çağlayan Kitabevi, 2021, (in Turkish)

11. Patent

11. 1 Symmetric Dual Reflector Antenna for Radiotelescope (V.B.Tarasov, P.V.Belyanski , A.N.Kozlov , M.I.Mustafayev) , Patent No 1845364, Moskova , 1985.

12. Administrative Positions

12.1 The Consultant of the Işik University Chess Club

13. Employment History

DATE	INSTITUTION	POSITION
1971-73	Academy of Sciences of Azerbaijan, Institute of Cybernetics	Ass. And Assoc. Prfessor
1974-77	Moskova State University, Faculty of Mechanics and Mathematics	Post doktoral research
1978-1990	Academy of Sciences of Azerbaijan, Institute of Cybernetics	Chairmen of Department
1990-1993	Academy of Sciences of Azerbaijan, Institute of Cybernetics	Leading Scientific Worker
1993-1999	Istanbul University, Faculty of Engineering	Professor
1999-2011	Isık University, Faculty of Arts and Sciences, Department of Mathematics	Professor
2011-2013	Isık University, Faculty of Arts and Sciences, Department of Mathematics	Chairmen of Department
2013-2019	Isık University, Faculty of Arts and Sciences, Department of Mathematics	Professor
2019-	Isık University, Faculty of Arts and Sciences, Department of Mathematics	Chairmen of Department

14. Scientific and Professional Membership

14.1 Optical Society of America

15. Other Scientific and Academic Activities

15.1 TWMS Journal of Applied and Engineering Mathematics (Editor in Chief)
15.2 TWMS Journal of Pure and Applied Mathematics (Member of the Editorial Board)

16. Reviewer Activities (SCI-Expanded Journals)

16.1 Applied and Computational Mathematics
16.2 Turkish Journal of Mathematics
16.3 Journal of American Optical Society

17. Courses Taught (Last Two Years)

Academic year	Course	Weekly load			Number of Students
		Lecture	Appl.	Lab.	
2021, Spring	Math 2107 Dif. Eq-s,	3	0	0	11
	Mate 2104 Lineer Cebir	3	0	0	15
2021, Fall	Mate 2107	3	0	0	11
	Mate 2104	3	0	0	12
2022, Spring	Mate 2104	3	0	0	17
	Math 2107	3	0	0	49