

Annual report on scientific social activity of the board of young scientists and specialists of IMM ANAS for 2017

1. Republican and international grant project:
 - a) Name of the foundation: the list of winner projects of main grant competitions (EIF-KETPL-2015-1(25)) announced in 2015 on complex scientific research programs of the Science Development Foundation under President of the Republic of Azerbaijan.
Name of the project:
Manager: Fuad Gambarov
Execution period: 24 months
Type of participation: Executor: FamilSeyfullayev
 - b) Name of the foundation: Science Development Foundation under President of the Republic of Azerbaijan
Name of the project: On additive and spin-orbital effects in low dimensional semiconductors and superconductors: application of topological structures in quantum informatics
Manager: AnvarNahmedov
Execution period: 36 months
Type of participation: Executor: Jafarova Aynura
 - c) Name of the programs: Approximation by neural networks and some issues of frames
Manager: Bilal Bilalov
Execution period: 24 months
Type of participation: Executor: Sadigova Sabina
4. Participation at the Republican and international scientific events (forms, conferences)

Name of the organization and event.

- a) The international scientific conference (25-26 may 2017) “Theoretical and applied problems of mathematics” devoted to 55 years of scientific State University and held together with IMM ANAS and Sumgait State University.
- b) The international scientific Conference devoted to 94years of the national Reader Heydar Aliyev on “Actual problems of modern natural sciences” Ganja State University, 2017.
- c) XX International conference of Turkey mechanical engineers. Turkey, Bursa, UludagUniversity . 05.09.-09.09.2017
- d) Leading res. ass. of “Nonharmonic Analysis” department of IMM phd in math. ass. prof. Sabina Sadigova and res. ass. of Computing mathematics and informatics department phd in phys. AynuraJafarova participated with reports at the international Conference “Mathematical methods of quantum

mechanics” held at Heidelberg University, Germany, on October 2-6, 2017. (Link: https://typo.iwr.uni-heidelberg.de/fileadmin/user_upload/4_IWR-S_Jafarova.pdf)

5. Organization of the other republican and international events (seminar related to propaganda of science, knowledge competitions etc.)

Sabina Sadigova, AynuraJafarova, Aydin Shukurov have participated at the first Confren of Young Scientists of Azerbaijan organized by the ANAS, ministry Education and Youth on December 15, 2017. Aida Guliyeva and chairman of the board of young scientists and specialists ass. prof. FamilSeyfullayev and co-chairman of the board EminBagirov have participated at the expositon.

6. Personel: Defended dissertations: philosophy doctor, diploma receiving: (doctoral/phil/doctor; prof; ass.prof.) phd in math: NasibovaNatavan, PhD in mech. BagirovEmin, ass.prof. ShahbandayevElmaddin

7. Information about awards and prizes.

By the resolution of the Presidium of ANAS no.282 dated from May 16, 2017m the first course holder of master degree YeterMuzakirkiziFarhadova was a winner of the competition and she was given the monetary premium in the amount of 500 manats for the third peace.

8. The board’s activity is lightened in Man media:

https://azertag.az/xeber/Azərbaycanın_genc_alimleri_Heydelberg_Universitetinde_elmi_muzakireler_aparıblar-1102750

<http://azpress.az/index.php?lang=az§ionid=news&id=73831>

<http://zim.az/diger-bolmeler/3151-amea-ryazyyat-v-mexanka-nsttutunun-semnarinda.html>

9. In the report period, 20 papers of young scientist were published in the Republic.

8 papers and 20 abstracts were published in impact factor foreign journals.

Xarici nəşr	
İmpakt faktorlu jurnalda məqalə	
1. A.M. Najafov, A.T. Orujova	On the solution of a class of partial differential equations, Electron. J. Qual. Theory Differ. Equ. 2017, No. 44, 1-9.

2. Alik M. Najafov, Nilufer R. Rustamova	Some properties of grand SobolevMorrey type spaces. Transactions of A. Razmadze Mathematical Institute (Thomson Reuters SCIE)
3. Eroglu A., Omarova M., Muradova Sh.	ELLIPTIC EQUATIONS WITH MEASURABLE COEFFICIENTS IN GENERALIZED WEIGHTED MORREY SPACES, Proceedings of the Institute of Mathematics and Mechanics, NAS of Azerbaijan, vol. 43, 2017, pp. 1-17 (çapa qəbul edilib) http://proc.imm.az/inpress/pimm0090.pdf
4.A.Kh. Asgarova, V.E. Ismailov	Diliberto–Straus algorithm for the uniform approximation by a sum of two algebras, Proc. Indian Acad. Sci. Math. Sci. 127 (2017), no. 2, 361-374. (Thomson Reuters SCIE)
5. A.Kh. Asgarova, V.E. Ismailov	On the representation by sums of algebras of continuous functions, C. R. Acad. Sci. Paris 355 (2017), 949–955. (Thomson Reuters SCIE)
6. Bilalov B.T., Sadigova S.R.	Frame properties of the part of a system of exponents with degenerate coefficient in Hardy classes. Georgian Mathematical Journal, ISSN (Online) 1572-9176, ISSN (Print) 1072-947X, DOI: https://doi.org/10.1515/gmj-2016-0051 , November 2016
7. Huseynli A.A., Mirzoyev V.S., Quliyeva A.A.	On Basicity of the Perturbed System of Exponents in Morrey-Lebesgue Space. AzJM, vol 7, No 2, 2017, p. 197-216
8.Shukurov, A. Sh	Comment on "On the Frame Properties of Degenerate System of Sines". J. Funct. Spaces 2017, Art. ID 9257076, 4 pp.
9. Shukurov, A. Sh., Ismailov, N. A	On the minimality of double exponential system in weighted Lebesgue space. Azerb. J. Math. 7 (2017), no. 1, 120-129.
10. Shukurov, A. Sh.	A note on the completeness and minimality of weighted trigonometric systems. Proc.Inst.Math. Mech. Natl. Acad. Sci. Azerb. 42 (2016), no. 2, 249--256
11. Shukurov A.Sh.	On the number of non-real eigenvalues of the Sturm-Liouville problem, Eurasian Mathematical Journal, Volume 8, Number 3 (2017), pp. 77 -84.
Məqalə	
1. Bilalov B.T., Huseynli A.A., Aleskerov M.İ.	On the basicity of unitary system of exponents in the variable exponent Lebesgue spaces. Transactions of NAS of Azerbaijan, Issue Mathematics, vol. XXXVII, No 1, 1-14, 2017

<p>2. N.R. Ahmadzade, Z.A. Kasumov,</p> <p>3. Гаджиев В.Дж., Мирзоева Г.Р., Шириев А.И.</p>	<p>On some properties of harmonic functions from Hardy-Morrey type classes. Caspian Journal of Applied Mathematics, Ecology and Economics, Vol. 5, No. 1, 2017, pp. 38-47</p> <p>О свободном колебании непрерывно неоднородно ортотропной прямоугольной пластинки, лежащей на неоднородно вязкоупругом основании. Строительная механика инженерных конструкций и сооружений. Москва, № 5, 2017, с.14-19. https://elibrary.ru/item.asp?id=30023940</p>
Tezis	
<p>1.Muradov T.R.</p> <p>2.İsmayilov M.İ.</p> <p>3. V.C. Hacıyev, Abdullah Avey, G.R. Mirzeyeva, A.İ.Şiriyev, M. Süzer.</p> <p>4. Cəfərova A. M., Cəfərov E. İ.</p> <p>5.Quliyeva A.A.</p> <p>6. Quliyeva A.A.</p> <p>7. Quliyeva A.A.</p>	<p>On bases from cosines in Lebesgue spaces with variable summability index. МЕЖДУНАРОДНАЯ МАТЕМАТИЧЕСКАЯ КОНФЕРЕНЦИЯ ПО ТЕОРИИ ФУНКЦИЙ, ПОСВЯЩЁННАЯ 100-ЛЕТИЮ ЧЛ.-КОРР. РАН СССР А.Ф. ЛЕОНТЬЕВА. г. Уфа, 24 – 27 мая 2017 г, с. 199</p> <p>Об обобщении бесселевых и гильбертовых систем в несепарабельных банаховых пространствах, Riyaziyyatın nəzəri və tətbiqi problemləri beynəlxalq elmi konfransın materialları, 25-26 may 2017-ci il, s. 79-80.</p> <p>Elastik Winkler əsas üzərində oturan homogen olmayan ortotropik lövhələrin sərbəst rəqsləri problemin həlli. XX.Ulusal Mekanik Kongresi, Türkiyə, Bursa, Uludağ Üniversitesi, 05.09.-09.09.2017.</p> <p>Yeni tip fərq tənlikləri cütlüklərinin dəqiq həlləri: Uilson və kəsilməz Han çoxhədliləri. // “Riyaziyyatın nəzəri və tətbiqi problemləri” beynəlxalq elmi konfrans materialları. Sumqayıt. 2017. s.22-23. http://sdu.edu.az/userfiles/file/conferences/math_01022016.pdf</p> <p>Базисность возмущенной системы экспонент в пространстве Морри-Лебег, Sumqayıt Dövlət Universitetinin yaradılmasının 55 illiyinə həsr olunmuş Beynəlxalq elmi konfransın Materialları, 25-26 may 2017, ss. 72-73</p> <p>Basicity of the perturbed system of exponents in morry-lebesgue space, International Scientific-Practical Conference modern mathematics and its applications. 18–20 May 2017, Ufa, pp. 64-67</p> <p>Modern problems of mathematics and mechanics Proceedings, of the International conference devoted to the 80-th anniversary of academician Akif Gadjev December 6-8, 2017, p.173</p>
Kitab	
<p>1.R. M.Aslanov, A.İ. Nijnikov, A.A. Muxanova, S.A. Muxanov, T.R. Muradov</p>	<p>«Высшая математика», “Prondo”, 2017, 328 səh.</p>