Department of Non-Harmonic Analysis Institute of Mathematics and Mechanics

National Academy of Sciences of Azerbaijan

BRIEF REPORT ON SCIENTIFIC & ORGANIZATIONAL ACTIVITIES FOR THE FIRST HALF OF 2018

On the report period, in the "Nonharmonic Analysis" department, scientific research works on the themes "Frame theory and its applications" and "Spectral properties of not self-adjoint differential operators" were carried out and 11 works were excited. The department's staff consists of 17 employees, including 1 doctor of scenes, 11 philosophy doctors (3 of them work part time), 2 research assistants, 3 laboratory assistants.

Every Thursday, at 12:00, and Wednesday at 11:00, the department holds regular seminars. A great majority of collaborators are engaged in pedagogical activity in higher educational institutions.

During report period, 29 scientific works were published. 9 of them were published abroad (TR-3: SCOPUS-2), 20 of them are Conference ales tracts. 6 papers were accepted for publication, 15 papers were submitted for publication. On the report period, the head of department B.T.Bilalov was a winner of the competition Science Development Foundation announced by Russia research assistant Aida Guliyeva was a winner of SDF "My first Grant".

The program guider by the correspondent member of ANAS Bilal Bilalov " Approximation by neural networks and some problems of frames" in being continued. Correspondent member of ANAS prof. B.Bilalov on 02.05.2018-06.05.2018 was on a professional trip in Moscow participate as an invited lecturer and a member of the program committee in the international Conference " Modern methods of theory of boundary value problems. Ponyryagen readings XXIX " devoted to 90 years of acad. V.A.Ilin At the conference he has given a plenary talk on "A boundary problem method for studying basicity problem of perturbed trigonometric systems and their generalization". Within the conference he had scientific discussion with accad. E.L.Moisev, prof. K.V.Sabitov, prof . A.M. Sedletkiy, prof. Z.Y. Fazullin, prof. A.A. Shalikov, prof. A.R. Soldatov and other scientific.

On 10.05.2018-16.05.2018, prof B. Bilalov was on a professional trip in Istanbul, Turkey in the International Conference on Mathematical Advances and

Applications (ICOMAA 2018) as an invited lecturer and a member of the organizational committee. In this Conference he has given a plenary talk "Basicity of trigonometric system in weighed Morrey spaces".

Within scientific relations between Yildiz Technical University and IMM ANAS , he had discussed with C. Karacam, Sh. Chetin, F. Shirin the results obtained on their dissertations. He was one of the editor-in-chiefs of proceedings of the Conference. On the report period, one of the collaborators of the department has defended doctor of science dissertation in mathematics two other collaborator were admitted to defense of doctor sciences dissertation in mathematics. Two of collaborators will soon defend philosophy doctor dissertation.

On the report period, in the meeting held by the Bound of Mathematical problems co-chaired by B. Bilalov, 17 themes were registered and affirmed 3 of them are doctor sciences dissertations. On the report period prof. B. Bilalov was the chairman of the Examination Commitment of Baku State University on mathematics.

On the report period, 2 members of "Azerbaijan Journal of Mathematics" and 1 member of the journals "Caspian Journal of Applied Mathematics and Ecology and Economics" was published.

A great majority of the department collaborators have activity participated at the International Conference a Mathematical Advances and Applications, on may 11-13, 2018, Istanbul, Turkey and " Operators Functions and Systems of Mathematical Physics Conference" (OFSMPC), 21-24 May, Khazar University.

Prof. B.T.Bilalov

Head of the Department of Non-Harmonic Analysis, IMM

Corresponding Member of the National Academy of Sciences of Azerbaijan