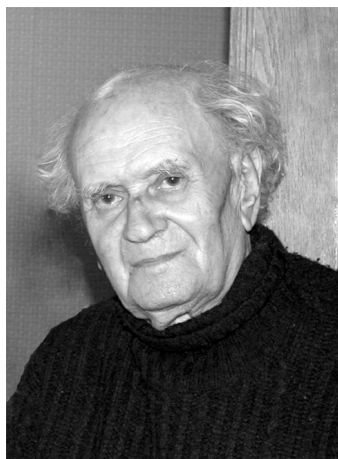


Emmanuil Moiseevich Zhmud’ (1918-2007)



The future remarkable algebraist was born on 30th July 1918 in Dnepropetrovsk, however, all his conscious life is connected with Kharkov, the city where his parents moved to in 1922. The family of the boy was quite gifted in the field of music, his father and uncle sang perfectly, and his grandfather, who was a tailor, played the trumpet. Therefore, Emmanuil Moiseevich was attracted to music since childhood, and his piano playing gave admiration to all his listeners till the end of his life.

The boy inherited his abilities in sciences from his mother, who was one of the best students of physico-mathematical faculty of Odessa University. His choice in favor of sciences was largely influenced by his friendly relations with the future Nobel Prize winner, physicist Lev Landau.

However, having entered Faculty of Physics and Mathematics of Kharkov State University (KhSU), a student Emmanuil Zhmud’ realized that he most of all appreciated the mathematical part of physics. Therefore, he got a transfer to the mathematical department of the faculty.

At that period he started his scientific research under the supervision of Professor A.K. Sushkevich. At first he became interested in number theory, then geometry and finally the theory of finite groups, to which he devoted his life.

In 1941 E. M. Zhmud' graduated from KhSU, but the Great Patriotic War, that had just broken out, interrupted his further research in the field of mathematics for some time. From 1941 till 1946 Emmanuil Moiseevich Zhmud' served in the Red Army. After demobilization he worked as a researcher at the Research Institute of Mathematics and Mechanics at KhSU and presented his PhD thesis "Non-unimodular transformations of square forms" in 1950. He started teaching mathematics at Kharkov Institute of Engineering and Economics in 1950. From 1958 till the early 1990s he worked at KhSU at the higher algebra department.

At the mechanico-mathematical faculty E. M. Zhmud' permanently taught both principal courses in higher algebra and number theory and special courses (theory of groups, theory of algebras, representations of finite groups, Galois theory, etc.). His lectures inspired love for algebra in many generations of mathematicians, who either became or did not become algebraists. The majority of students were allocated to the department of algebra being influenced by his teaching. Together with Professor S. D. Berman he supervised the city algebraic seminar. A. Vejtsblit, A. Vyshnevetskiy, G. Kurinnoy, and L. Pronin were among his pupils.

In 1972 E. M. Zhmud' presented his doctoral thesis "Lattice-theoretical properties of kernels of linear representations of finite groups". The paper was highly evaluated by the official opponents – I. D. Ado, S. D. Berman, I. M. Grayev, and its author was unanimously given the doctoral degree in physical and mathematical sciences by the Scientific Council of Kazan University. However, the state policy of anti-Semitism flourishing at that period in the country caused the fact that the Higher Certifying Committee of USSR did not confirm the verdict of the Scientific Council. But this fact did not affect in any way the intensity of the talented algebraist's creative research.

E. M. Zhmud's scientific activity never stopped during his entire life. After his retirement he wrote no less scientific papers than he did during his work at the university. His passion for mathematics was not just a professional call; it was the condition of his soul. The results obtained by him are distinguished by completeness and refinement. He was engaged in the research of projective representations, constructed the duality between the kernels and antikernels of indecomposable representations of a group, discovered the criterion of existence of an exact representation of a finite group that decomposes into a given number of irreducible components, developed the theory of symplectic geometries on finite Abelian

groups, and described finite CM-groups. He was interested in zeros of characters of finite groups and the so-called connectivity relations on groups during the last years of his life.

E. M. Zhmud' is the author of more than fifty scientific papers in algebra, each of which made an essential contribution to science. In co-authorship with I. Berkovich he wrote the two-volume monograph "Characters of Finite Groups", published by American Mathematical Society in 1999. Till his last days Emmanuil Moiseevich worked preparing the second edition of this monograph.

Emmanuil Moiseevich was able to see beauty not only in mathematics. He had a subtle perception and understanding of classical music, and drew perfectly. Being fluent in French and German, he began to write his papers in English at a rather mature age, publishing them in prestigious international scientific journals.

Creative work presented utmost happiness for Emmanuil Moiseevich, and he considered the ability to be engaged in it during his whole life as a great luck. Emmanuil Moiseevich passed away on 29th December 2007. We will always remember this wonderful and surprisingly modest person.

S. Favorov, B. Novikov, A. Vyshnevetskiy, G. Zholtkevich.

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