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**OBITUARY**

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**Alexander M. Krasnosel'skii**  
**(April 30, 1955–March 29, 2024)**

Chief Researcher of M.S. Pinsky Laboratory No. 1 (the Institute for Information Transmission Problems, the Russian Academy of Sciences) and our dear friend, colleague, coauthor, and interlocutor, Alexander Krasnosel'skii passed away on March 29, 2024, at the age of 68 after a severe operation.

Alexander Krasnosel'skii, in full Alexander Markovich Krasnosel'skii, was born on April 30, 1955, in the family of Mark Alexandrovich Krasnosel'skii, one of the founders of nonlinear functional analysis in the USSR. Krasnosel'skii's house was always full of mathematicians of various ages (Mark's students and colleagues), and the friendly atmosphere in the house was largely the merit of Alexander's mother, Sarra Izrailevna. Undoubtedly, that atmosphere influenced Alexander's lifestyle: in any company, he became one of the centers of communication.

Having graduated from Moscow State University, Krasnosel'skii Jr. (further referred to as Krasnosel'skii) worked for almost twelve years in the Laboratory of Mathematical Methods at the All-Union Cardiology Research Center, the USSR Academy of Medical Sciences. He was a member of the group to design an automatic diagnosis system for heart rhythm disorders. During that time, Krasnosel'skii defended his candidate's and doctoral dissertations and, in fact, pioneered the harmonic balance method in nonlinear analysis. The results of his research were published in a monograph, which was later translated and published in English.

Upon moving to the Institute for Information Transmission Problems (IITP), the USSR Academy of Sciences, Alexander's scientific interests were closely connected with the development of topological methods of nonlinear analysis for studying automatic regulation and control systems as well as systems arising in information transmission networks. Also, he was actively involved in elaborating the mathematical theory of hysteresis and the stability theory of asynchronous control systems and related numerical methods.

Since 1991 and until the last time, Krasnosel'skii worked in M.S. Pinsker Laboratory No. 1 (Theory of Information Transmission and Control) of IITP as a leading executor on all research topics of the Laboratory. In recent years, Alexander was an invariable member of a dissertation council and the Academic Council of IITP. He was a member of the editorial board of *Automation and Remote Control*.

Krasnosel'skii loved life very much and was very fond of mathematics, including elementary mathematics. He loved to discuss it with friends and especially with the young. In the last decades, one of Alexander's main hobbies was active teaching, first at the Jewish State Academy and then at the Higher School of Economics, where he headed IITP's basic department and was a member of the Academic Council of the Faculty of Mathematics. Clearly, he always lacked teaching when working in the academic institution. Krasnosel'skii always sincerely admired the abilities of young mathematicians born at the Faculty of Mathematics with his participation.

Alexander was an outstanding and versatile personality: he was passionate about books, loved traveling, and was seriously engaged in bicycle touring. Avoiding conflicts, he was at the same time firm in matters of principle. Alexander's self-comprehension as a member of a research team was his peculiarity: in this respect, he could always be relied upon.

Alexander was a deeply religious man. He tenderly loved his four children and seven grandchildren. He loved to make friends and knew how to do it.

May Alexander's memory live on forever!

Dr. Sci. (Phys.–Math.) *M.L. Blank*

Cand. Sci. (Phys.–Math.) *V.I. Venets*

PhD *S. Vlăduț*

Corresponding Member of RAS *A.A. Galyaev*

Dr. Sci. (Phys.–Math.) *V.S. Kozyakin*

Academician of RAS *N.A. Kuznetsov*

Dr. Sci. (Phys.–Math.) *S.K. Lando*

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Dr. Sci. (Phys.–Math.) *G.I. Olshanski*

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