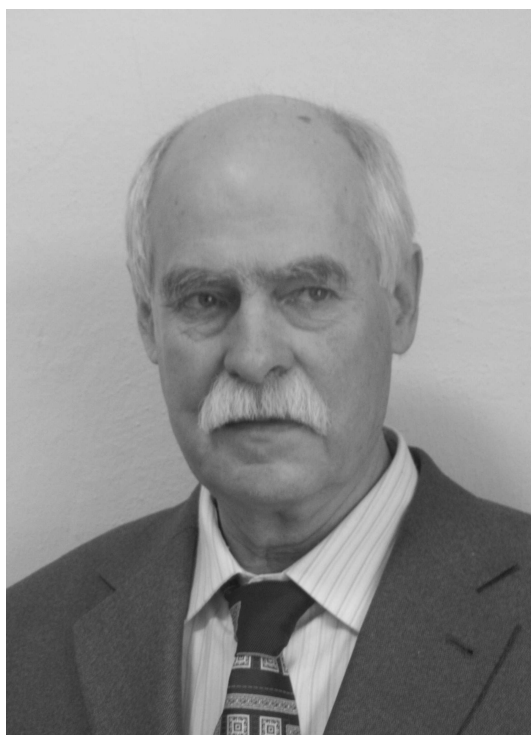


**VOLODYMYR DMYTROYCH KOSHMANENKO
(TO HIS 70 TH BIRTHDAY)**



Volodymyr Koshmanenko, a famous Ukrainian mathematician, was born on July 28, 1943, in Dnipropetrovsk. In 1960, he entered the Department of Physics at Dnipropetrovsk State University and graduated from it in 1966. He attended the lectures of the mathematical content mainly from the third year of study. This led him to a choice of mathematical style of thinking. Thus, his Master paper was devoted to axiomatic quantum field theory. As a student he solved the problem of the representation of unbounded operators in the Fock space in the normal form through creation and annihilation operators, posed by Yu. M. Berezansky. Solving this problem was one of conditions to become a post-graduate student in the Institute of Mathematics of the Academy of Science of Ukraine. During his post-graduate courses, 1967-1970, he continued study of the axiomatic approach in quantum field theory. He showed that any Boson scalar quantum field admitted a representation and an axiomatic formulation in terms of operator Jacobi matrices. It was the main result of his PhD thesis (1970) (the scientific adviser was Prof. Yu. M. Berezansky). From 1970 up to now he occupied different scientific positions, from junior to leading researcher at the Institute of Mathematics in Kyiv. In 1985, he got the Doctor degree in mathematics for the theses "The scattering theory in terms of bilinear functionals" with M. S. Birman, I. Ya. Arefieva, and M. I. Portenko as

the main referees. In 1995, he became a professor of Higher Mathematics Department in Kyiv Pedagogical University.

Simultaneously with his scientific work, V. Koshmanenko gives various lectures courses at the Taras Shevchenko State University, Dragomanov National Pedagogical University, National University of "Kyiv-Mohyla Academy" every year.

Research interests of Prof. V. Koshmanenko include the areas of quantum field theory, scattering theory, spectral theory of linear operators, theory of bilinear and quadratic forms, theory of singular quadratic forms, theory of singular perturbations, self-adjoint extensions of symmetric operators, Schrödinger operators with singular perturbations, scales of Hilbert spaces, fractal structure of spectrum, theory of conflict dynamical systems.

He published 3 monographs and over 120 papers in the leading journals of worlds.

In particular, he developed a new approach to the axiomatic quantum field theory in terms of operator Jacobi matrices (1970), proposed a construction of wave and scattering operators in terms of bilinear functionals and showed that the known Haag-Ruelle scattering theory admitted a formulation as a theory in a pair of state spaces (1974), investigated the scattering problem for the Schrödinger operators with singular perturbation and the problem operator representation for non-closable quadratic forms (1979), introduced the notion of a singular quadratic form and obtained a classification of such forms in scales of Hilbert spaces (1982), developed a self-adjoint extension approach to the singular perturbation theory (1987-1993), studied a spectral problem for a Schrödinger operator with perturbations supported by null set (1994-1998), developed the Krein theory of self-adjoint extensions of singular rank one perturbations (1999), investigated the direct and the inverse negative eigenvalues problem under singular perturbations of self-adjoint operators (2001-2003), proposed a new construction of singularly perturbed operators by the rigged Hilbert space method (2005), developed an original theory of conflict dynamical systems and proved a theorem of conflict (2003-2005), showed the possibility to reconstruct the lost physical type spectrum under interaction with a source of purely singular continuous spectrum and proposed the conjecture on existence of a correspondence between the singular continuous spectrum and the spirit field of biological nature (2007), proposed also a dynamical model of complex system with conflict interaction and cyclic migration (2006-2008), introduced the notion of structural similarity measures (2009), investigates the model of conflict triad and the fire-water model with limit cyclic orbits (2011-2013).

The mathematical results by V. Koshmanenko are cited over 363 times, according to AMS MathSciNet.

V. Koshmanenko has gained the Yu. O. Mitropol'sky Award from the National Academy of Science of Ukraine in 2012.

Not only does he has a deep knowledge in mathematics but also he is interested in Ukrainian history and culture, folk art and language. He gets great pleasure from working at his summer home. In recent years, he has become an amateur beekeeper. We congratulate V. Koshmanenko with his anniversary, may he be healthy, wealthy, full of new scientific ideas and inspiration. May his scientific path be long and fruitful.

The Editorial Board