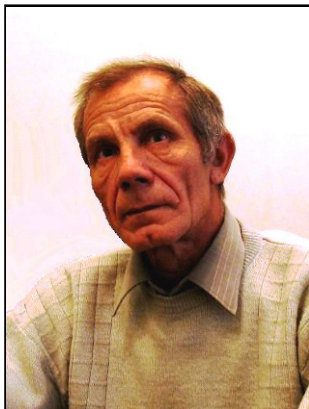


Obituary: Vasyl Ivanovych Andriychuk (18.09.1948–7.07.2012)



Vasyl Ivanovych Andriychuk was born on September 18, 1948 in a small village Yablunka, Rivne region, Ukraine. The village was very small and to get to a secondary school Andriychuk should go to the neighbor village Malynsk (about 10 km from Yablunka). He finished the school with a gold medal in 1966 and the same year entered the Faculty of Mechanics and Mathematics of the Lviv State University. In 1971 he graduated from the university with a distinguished diploma, and during 1971–1974 studied at post-graduate studies (called “aspirantura” in the Soviet times) at the same university on the chair of Function Theory and Functional Analysis under supervision of Oleg M. Vvedenskyi (see [43]), a former student of Igor P. Shafarevich, who directed scientific interests of Andriychuk to the area of algebraic geometry, number theory and theory of algebraic numbers. In 1973 Andriychuk started his pedagogical and scientific activity as an assistant at the chair of Function Theory and Functional Analysis, and since 1975 he was a senior lecturer at the chair of Geometry at the university. In 1983 Andriychuk defended his PhD dissertation *Study on Arithmetics*

of Elliptic Curves over General Local Fields and was awarded with the Candidate of Sciences degree. The same year he became a docent at the chair of Algebra and Topology. In 1985–1988 he worked at the University of Blida in Algeria.

Scientific works of Andriychuk concern generalizations of many important results of algebraic geometry known for finite or global fields to the case of pseudofinite or pseudoglobal fields. In particular, in [24] he proved a counterpart of Chebotarev density theorem for norms on pseudoglobal fields; in [16, 20, 32, 35] he (jointly with his PhD student Ludmyla Stakhiv) studied cohomological properties of the Brauer group of a pseudoglobal field and proved that the Brauer group of transcendent extensions of certain pseudoglobal fields does not depend on the degree of transcendence; in [23] he proved the cyclicity of any finite-dimensional central simple algebra over a pseudoglobal field. In [14, 19, 38, 42] Andriychuk generalized the Tate–Nakayama Theorem to the case of tori over pseudoglobal fields and applied this generalization to study the Tate–Shafarevich groups of algebraic tori over a pseudoglobal field, in particular, he discovered a counterpart of the Voskresenskii exact sequence for tori over pseudoglobal fields; in [31, 39] he studied the Hasse principle for extensions of pseudoglobal fields; in [33] he generalized the Tate duality theorem to certain finite groups of finite modules over a pseudoglobal field; in [18, 25] he proved certain deep duality theorems for cohomologies of projective curves and algebraic varieties over pseudoglobal fields. In [6, 7, 8, 10, 12] he calculated Tate–Shafarevich product in elliptic curves over certain pseudoglobal fields. These and many other results composed his habilitation dissertation *Algebraic Manifolds and Fields of Algebraic Functions over Pseudofinite Fields* defended in 2002 at the Kyiv National University. Since 2003 and till his death in July 2012, Vasyl Andriychuk worked as a professor at the chair of Algebra and Logic of the Lviv National University.

Andriychuk is the author of more than 75 mathematical papers and conference reports, a coauthor of four textbooks in Algebra and Number Theory, was a member of editorial boards of mathematical journals: Central European Journal of Mathematics, Matematychni Studii, Visnyk of Lviv University.

Professor Andriychuk was a broadly recognized expert in different fields of mathematics. He was well versed in literature and music, was a sensitive, intelligent man, a good friend.

Vasyl Andriychuk was deeply engaged into editorial responsibilities in the Central European Journal of Mathematics, where he served as an editor since 2007 up to 2012. CEJM appreciates a lot his contribution to the development of the journal.

Taras O. Banakh, Fedor A. Bogomolov, Andrij I. Gatalevych,
Ihor J. Guran, Yuriy B. Ishchuk, Mykola Ya. Komarnytskyi, Igor S. Kuz,
Ivanna O. Melnyk, Vasyl M. Petrychkovych, Yaroslav G. Prytula,
Oleh M. Romaniv, Oleh B. Skaskiv, Ludmyla L. Stakhiv, Georgiy T. Sullym,
Bohdan V. Zabavskyi, Volodymir P. Zelisko, Mykhajlo M. Zarichnyi

A similar note appeared in Matematychni Studii, 2012, 38(2), 218–219

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