## YURIJ MAKAROVYCH BEREZANSKY (to 90th birthday anniversary)



On the 8th of May, it will be 90 to a world-famous Ukrainian mathematician Yurij Makarovych Berezansky who made a significant contribution to various branches of contemporary mathematics, a teacher of some generations of mathematicians working now in Ukraine, USA, Germany, Great Britain, Poland and other countries, an excellent educator and a decent man. He was born in Kyiv in an intelligent Ukrainian family of a scientist-agriculturist and a librarian, and his whole further life is inseparably tied with this city. In 1944, after 8-years education at a secondary school which he had got even before the World War Two, Yu.M. enrolled in the T. Shevchenko State University to study physics. In 1948, he graduated from the Department of Mechanics and Mathematics. A huge role in forming his abilities for mathematics was played by S.I. Zuhovitsky whose lectures on mathematical analysis were so rich in content and delightful that the youth was quite resolved to become not a physicist, but a mathematician. Soon the mathematical gift of Yu.M. attracted attention of S.G. Krein thanks to whom he began to engage in mathematics more actively. This outstanding scientist and individual not only involved Yu.M. into intensive scientific work, but had an essential influence upon his living way full of postwar difficulties fallen on the heads of people accused by the ruling regime only that they miraculously survived during the German occupation.

The postgraduate education (1948 - 1951) guided by M.G. Krein and S.G. Krein took place at the Institute of Mathematics of Academy of Sciences of Ukrainian SSR. Since then all the scientific work of Yu.M. is closely linked with this Institute. Here he obtained (1951) his PhD for the thesis "Hypercomplex systems with a compact or discrete basis", and here, in 1956, he was awarded with the Doctor of Science degree

for the dissertation "Some problems of the spectral theory for partial differential and partial difference equations". In this Institute he held various researcher positions: junior (1951 - 1953) and senior (1953 - 1960) researchers, head of the Department of Mathematical (1960 - 1985) and then Functional (1985 - 2001) Analysis, chief researcher (2001 - present). From 1956 Berezansky stands at the head of the organized by him at the Institute, well-known in Ukraine and many other countries seminar on functional analysis which works successfully up to now. In 1961, Yu.M. became a Full Professor. He was elected a Corresponding Member (1964) and then Academician (1988) of the National Academy of Sciences of Ukraine.

Within his research activity Yu.M. Berezansky has got a number of remarkable results in functional analysis, operator theory, theory of differential equations and their applications to mathematical and quantum physics. His ideas and methods entered deeply into the modern mathematics. They are a source of creative work for many mathematicians both in Ukraine and abroad. The list of themes where Berezanzky's investigations became fundamental and in some cases even determined the future of these directions includes: the spectral theory of self-adjoint operators (in particular, partial differential and difference ones) and their commuting families, generalized functions, harmonic analysis, boundary value problems for differential and difference equations, inverse problems of spectral analysis, infinite-dimensional analysis, hypercomplex systems. His scientific heritage consists of over 260 papers and 6 monographs translated in English. It is a good example of harmonious combination of modern and classic approaches, abstract theories and concrete results. For his outstanding scientific achievements Berezansky was awarded (1998) with the State Prize of Ukraine in Science and Technology. He is also a winner of Krylov (1980), Bogoliubov (1997), Ostrogradsky (2006), and M. Krein (2011) Prizes of NASU. In 2005, Yu.M. was graced with the title of Honoured Scientist of Ukraine. He is a member of Kyiv, Ukrainian, Moscow, American Mathematical Societies. He participated in the international conferences held in many countries including Ukraine, Russia, USA, Germany, Poland, Italy, Sweden and others.

The extraordinary mathematical talent of Yu.M. was always accompanied by not less exceptional pedagogical one. For a long time (1954 - 1992; 1999 - 2010) he taught and conducted research work at T. Shevchenko National University. He also lectured (1994 - 1996) at Sklodowska-Curie University of Lublin (Poland). His lectures and talks at seminars and conferences are always understandable and instructive. They are distinguished by a deep penetration into the essence of a subject under discussion and so they generate a genuine interest and a desire to research. Probably therefore they are popular and attract many listeners. He created a wonderful scientific school whose results are acknowledged worldwide. A lot of high level scientists are his former students. At present, some of them work in the prestigious institutions and universities in Ukraine and outside of it. He has guided 14 Doctor of Science dissertations and 43 PhD theses.

Twenty years ago Yu.M. initiated a publication of the journal "Methods of Functional Analysis and Topology", and he is its Editor-in-Chief from the day of its foundation. He has also been and he is continuing now to be a member of editorial boards of some other well-known mathematical journals.

Yu.M. Berezansky is not only an excellent mathematician and educator, but a non-trivial personality with his own opinion on every thing, a man of mark, a patriot of his country Ukraine in the best sense of the word, who was never indifferent to its fate. He always defended, often even at the risk of the university career, the right of his nation to identity, sovereignty, unity and independence, took an active part in all actions aimed to protection of democratic transformations in his motherland, to revival of the Ukrainian culture and language, to progress in its science. In spite of the venerable age and a very

heavy, painful premature loss - the tragic death of his daughter Natasha, Yu.M. endeavours to work intensively on the current mathematical problems. We wish him health and good luck in solving the most important and interesting of them. Let his creative star light longest possible the way to new discoveries for young people born in the independent Ukraine, and let his own eyes see it as a peaceful, successful, truly constitutional state with the highest standards of science and culture.

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