YULIJ SERGEEVICH ILYASHENKO’S
70TH BIRTHDAY ANNIVERSARY

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This issue of “Transactions of the Moscow Mathematical Society” is dedicated to a
member of the Editorial Board of the journal, long-term vice president of the Moscow
Mathematical Society Yulij Sergeevich Ilyashenko, who turned 70 on November 4, 2013.
We wish Yulij Sergeevich good health and further achievements in his work for the benefit
of mathematics and mathematical education in our country.

Preface

Yulij Sergeevich Ilyashenko recently turned 70 and it is a great honor for both of us to
participate in the preparation of this issue of “Transactions of the Moscow Mathematical
Society” dedicated to this remarkable event.

The mathematical achievements of Yu.S. such as finding mistakes in the Petrovsky–
Landis approach and pointing out a gap in Dulac’s memoir, the proof of individual
finiteness theorem, the Gorodetskii–Ilyashenko strategy for constructing examples, etc.,
are all well known. Instead of listing them we want to give a few details showing Yulij
Sergeevich as “the father of a scientific family” taking care of his students for many years
in a row.

Every summer Yu.S. brings his students together for a summer school, and intensive
work at the school often determines what will happen though the entire next year. These
schools take place at different locations (near Dubna, at Solovetsky Islands, in the moun-
tains of Slovakia, or in the Bezengi Hiking Camp). Of course, mathematics alternates
with the long walks which Yu.S. enjoys; for example, the starting point of work that led
to the dissertation of one of the authors (I. Sch.) was a conversation at sunset in the
mountains at about 9,000 feet.
In the second half of the 1990s A. S. Gorodetskii and Yu.S. suggested a strategy to construct typical examples of a certain behavior of dynamical systems. A significant part of this work was done during one long winter walk. Gorodetskii also recalls how Yu.S., his wife Elena Nicolaevna, and all members of the seminar showed up at his birthday and completely filled his 80 square foot room in a dorm; this was very touching.

Yu.S. is very generous in sharing ideas with his students. One of the authors of this preface (V. K.) recalls how he lost a scientific bet with Yu.S.: when Yu.S. suggested an idea that later became a basis of work about measures with zero Lyapunov exponent, V.K.'s first reaction was “But this cannot work!”. It turned out, however, that Ilyashenko was right.

We cannot stop admiring Yu.S.’s vigor. I.Sch. recalls that in one of his visits to Cornell University Yu.S. invited him for a walk that ended with a bath under the waterfall. This was at the end of October, and it was only Yu.S. who actually did go in the water. I.Sch. was wrapping himself up in a warm jacket while trying to get away from freezing wind. Another story is related to teaching loads: at one of the traditional Friday seminars, after what he thought was an exhausting day (teaching three classes), I.Sch. asked Yulij Sergeevich how many classes a day Yulij used to teach. It turned out that it was four, and this was not such a long time ago. Since then I.Sch. has never complained about being tired after teaching three classes one after another.

Translated by SERGEI GELFAND

Originally published in Russian