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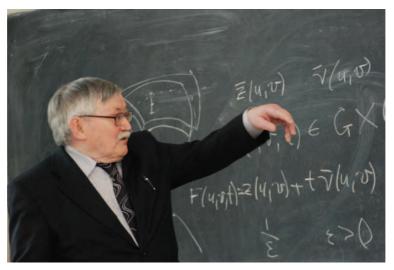
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RESHETNYAK'S PATH AND GIFT

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ABSTRACT. This is a short homage to Yuriĭ Grigor'evich Reshetnyak on the occassion of his 85th birthday.



September 26, 2014 is the 85th birthday of Yuriĭ G. Reshetnyak. The long path of life has been traversed, much was done, and there is something to share with and to bequeath to the others.

Reshetnyak is a mathematician raised by the Leningrad-Petersburg mathematical school, a student of Alexandr D. Alexandrov. Reshetnyak is a founder of his own original school of geometric analysis and a teacher of many

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generations of the alumni of the Mechanics and Mathematics Department of Novosibirsk State University.

The term "geometric analysis" is a recent brand of science. So we call the mathematical area at the juncture of geometry, partial differential equations, measure and function theories, and functional analysis. Reshetnyak is one of the world renowned leaders of research in the area. His creative approach is marked with depth, conciseness, nontriviality, and originality. Reshetnyak's style is simple and appealing, free of embellishment and flourish but meticulously exact in details and open to new vistas. The mathematical techniques of Reshetnyak are versatile and virtuoso.

Reshetnyak authors the classical results in the theory of space mappings, real function theory, variational calculus, and convex geometry. He solved Lavrentiev's celebrated problem of stability in the Liouville theorem, gave a miraculous description of the isothermal coordinates on the manifolds of bounded curvature, propounded the theory of nonsmooth curves, etc. It is impossible to list all his contributions to analysis and geometry.

Many mathematicians are dispersed around the world. Mathematics is one of the today's mass professions. No deficit is observed in the supply of well-educated professional mathematicians that contribute their lepta to the treasure-trove of science. There is a much smaller fraction of those with a special mathematical gift. The gift reveals itself in the ability of instantaneously grasping the core of the problem encountered and foreseeing the turnpike of solution together with all obstacles and means needed to complete another pursue of truth. Unfortunately, the mathematical gift is not always accompanied with hard working and struggle for the crowing end. Reshetnyak is not of the kind, for his ability to work industriously is limitless as well as his devotion to the business he belongs to.

The mathematical gift reveals itself in the green years. Many gifted persons swim in the waves of the juvenile rapture of the first inklings of the talents they have, but are shortly fatigued by the challenges and burdens of the gift. Mathematics, as well as any exact science, tries to eliminated anything subjective from its content. That is why the business of mathematics does not always lead to the harmonic development of a person, while often bringing the illusions of self-conceit and exceptionalism.

Reshetnyak belongs to the rare pleiades of those who are free from whatever illusions. The particular features of Reshetnyak are his endeavor to serve the truth, extreme decency in everything, openness, and respect to everybody in company with steadfast principles and robustness. These qualities of Reshetnyak are as precious as rare. It is them that entail his long-term creativity and ever-fresh passion to mathematics. It is them that make his personality bright and attractive.

Any communication with Reshetnyak is full of pleasure to his relatives, students, and colleagues. In these jubilant days all of them wish Reshetnyak health, further achievements, and new grand and great grand children.

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