KOLMOGOROV: LIFE AND CREATIVE ACTIVITIES

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"Kolmogorov occupies a unique place in modern mathematics and in the scientific world. By the diversity and breadth of his scientific interest he recalls the classical natural scientists of past centuries."
Bogolyubov, Gnedenko and Sobolev ([21], page 24)

In 1985, 1986 and 1987 Nauka (Science) publishers issued three volumes of Andrei Nikolaevich's selected works (in Russian) with commentaries by him as well as by his pupils and followers:

Mathematics and Mechanics
Probability Theory and Mathematical Statistics
Information Theory and the Theory of Algorithms

Though these three volumes [MM, PS, IA] contain as many as 60, 53 and 13 papers, respectively (author's selection), they cover far from all that he accomplished in these areas of science (see the list of Andrei Nikolaevich Kolmogorov's works on pages 945–964). However, even a brief review of the lists of contents astonishes the reader with the breadth and profoundness of the material therein.

Topics in the theory of trigonometric series, theory of measure and sets, studies in the theory of integration, approximation theory, constructive logic, topology, theory of superposition of functions and Hilbert's 13th problem, topics in classical mechanics, ergodic theory, theory of turbulence, diffusion and patterns (models) in the dynamics of populations, papers on the foundations of probability theory, limit theorems, theory of stochastic (Markov, stationary, branching,...) processes, mathematical statistics, theory of algorithms, information theory,... —even this is hardly a complete list of all the branches of science in which Andrei Nikolaevich obtained fundamentally important results, which determined the state of many fields of 20th century mathematics and possible directions for their development.

Kolmogorov's papers on the applications of mathematical methods in the social sciences (including articles on the theory of poetry and the statistics of text and literature), the history and methodology of mathematics and the teaching of mathematics in schools, together with popular works for schoolchildren and schoolteachers of mathematics, will supposedly be included in the forthcoming volumes of his selected works, already scheduled for publication.

The exceptional breadth of Andrei Nikolaevich Kolmogorov's scientific interests, and his extraordinary scientific productivity and generosity, are clearly indicated by the titles of his lectures, delivered at meetings of the Moscow Mathematical Society over many years.