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“Days on Diffraction” is an annual conference taking place in St. Petersburg since 1968. The event is organized in May–June by St. Petersburg University, St. Petersburg Department of Steklov Mathematical Institute and Euler International Mathematical Institute of the Russian Academy of Sciences.

About 180 scientists come from different parts of the world to participate in “Days on Diffraction” 2012; the Organizing Committee thanks all of them. Of special gratitude are the authors of extended abstracts submitted to the Proceedings; 51 of them (selected by peer-review) are published in the present issue.

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THE 125TH ANNIVERSARY OF V.I. SMIRNOV'S BIRTHDAY



The 125th anniversary of Vladimir Ivanovich Smirnov's birthday occurs on 10 June 2012. He is known not only as a prominent researcher in the fields of mathematics and mechanics, but also as a reformer of the mathematical instruction at the Leningrad (now St.Petersburg) University. His interest in mathematics dates back to the years of his education at the St.Petersburg Gymnasium no. 2, where his schoolmates were A.A. Friedmann and J.D. Tamarkin. At the St.Petersburg University, they formed the nucleus of a group of brilliant disciples of V.A. Steklov. Many years later, Smirnov accomplished

the creation of the famous Leningrad school of Mathematical Physics that had been initiated by Steklov. A significant role in the formation of this school belongs to the 5-volume "A Course of Higher Mathematics", for which Smirnov was awarded the Stalin prize for 1948 (later renamed as the State prize).

During his long career at the Leningrad University, Smirnov headed many departments. Some of them he organized himself, in particular, the renowned Departments of Mathematical Physics within the Faculties of Physics and of Mathematics and Mechanics. He headed both of them until the death in 1974, when L.D. Faddeev (famous for many discoveries in theoretical physics that include Faddeev equations of the quantum three-body problem, Faddeev–Popov ghosts etc.) and N.N. Uraltseva (well-known for her fundamental results concerning nonlinear partial differential equations) became his successors at the Physics and Mathematics and Mechanics faculties, respectively.

Smirnov's works are classics in various fields of mathematics. Best known are his contributions to complex analysis and the mathematical theory of diffraction. His method of functionally invariant solutions (it was developed in collaboration with S.L. Sobolev), that allowed to obtain explicit solutions for a number of important problems for the wave equation in domains with plane boundaries, is still developing further at present.

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