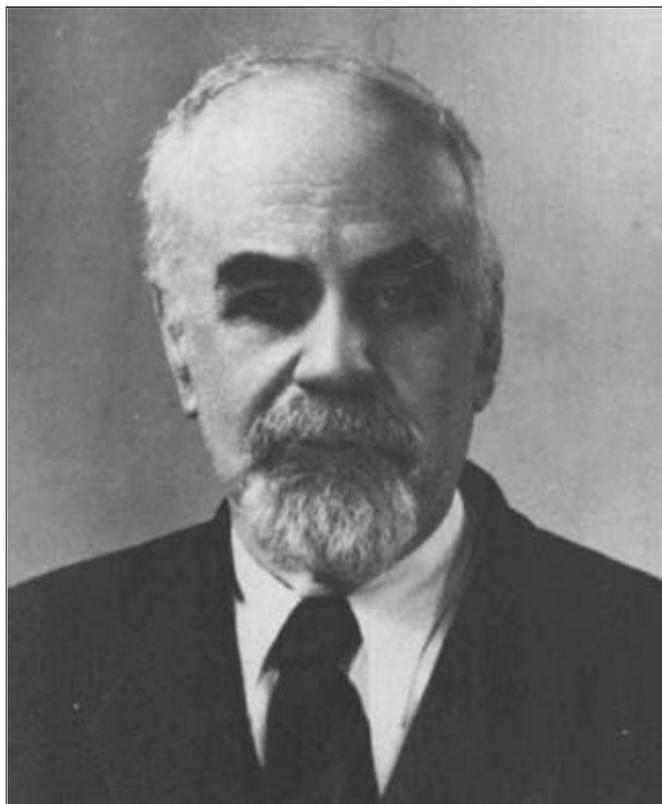# Vladimir Ivanovich Smirnov

Born: 10 June 1887 in St Petersburg, Russia
Died: 11 Feb 1974 in Leningrad, USSR

Vladimir Smirnov attended the 2nd Gymnasium, the oldest secondary school in St Petersburg, and there he won the gold medal for mathematics. From school he entered the Physics and Mathematics Faculty of St Petersburg University.

Smirnov had become friends with a number of outstanding mathematicians while at the 2nd Gymnasium. He was particularly friendly with Friedmann and Tamarkin, who were in the class below him at school. Valentina Doinikova, who was a friend of Friedmann, describes how the three went around together while undergraduates at St Petersburg University:-

Friedmann, Tamarkin and Smirnov often came together, and they were called 'the boys from the second Gymnasium'. They were always smart and neatly dressed, and always called each other - in public - by their first name and patronymic.

In 1910 Smirnov graduated from St Petersburg and remained at the University to study for the higher degrees which would allow him to become a university teacher. At the University a circle was formed in 1911 to study mathematical analysis and mechanics. Smirnov was a very active member of this circle, for example lecturing on the theory of algebraic equations, particularly the work of Goursat and Appell. In session 1911-12 he gave nine lectures on Goursat's books.

Smirnov worked jointly with his friends from the 2nd Gymnasium. He published a joint paper with Friedmann in 1913 which was published in the *Journal of the Russian Physico-Chemical Society*

(Physics Section). He wrote the first volume of his major five volume work *A Course in Higher Mathematics* jointly with Tamarkin.

From 1912 Smirnov taught at the St Petersburg Institute of Railway Engineering. He taught at Simferopol University in the southern Ukraine from 1919 to 1922, then he returned to St Petersburg (by now Leningrad). Smirnov was awarded his doctorate in 1936 and he became head of the Institute of Mathematics and Mechanics. He became the head of the Mathematics School at the University of Leningrad and was elected to the USSR Academy of Sciences.

In 1953 Smirnov organised the Leningrad Mathematical Seminar. To some extent this Seminar also filled the gap left when the Leningrad Mathematical Society disbanded due to political pressure in the late 1920s. Smirnov had been an active member of the Leningrad Mathematical Society through the 1920s and he was a strong believer in relaunching the Society. In 1959, mainly due to the efforts of Smirnov, it became possible to restart the Leningrad Mathematical Society and Smirnov was elected the honorary president of the Society.

Smirnov's mathematical activity was in both pure and applied mathematics. He wrote the five volume work *A Course in Higher Mathematics* referred to above, which was widely used in Russia. He worked on conjugate functions in multidimensional euclidean space and the theory of functions of a complex variable. With Sobolev he devised a method for obtaining solutions on the propagation of waves in elastic media with plane boundaries. Other applied mathematical work resulted in him developing methods for studying oscillations of elastic spheres.

In [1] the authors write:-

> *... V I Smirnov was not only an outstanding mathematician and a famous historian of science, but also a person of exceptional nobility, benevolence and culture. All these qualities left a lasting impression even on those who seldom had occasion to meet this remarkable man in person, still more on his pupils and associates. Their love and respect for their teacher's memory were reflected in a three-day scientific conference which was held in Leningrad in June* 1987 *and was dedicated to the centenary of the scientist's birth.*

List of References (18 books/articles)