

**“CHERISH THE FOOTPRINTS OF MAN ON THE SAND OF TIME!”  
(V. I. SMIRNOV)**

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The year 2017 marked the 130th anniversary of the birth of Vladimir Ivanovich Smirnov, an excellent mathematician and outstanding enlightener. His role in the preservation and development of the Leningrad – St. Petersburg mathematical school cannot be overstated.

He organized the Research Institute of Mathematics and Mechanics at the University, founded three teaching departments, inspired several research fields. A brilliant teacher, he educated many prominent scientists, created the five-volume “Course of Higher Mathematics” (a genuine mathematical encyclopedia in those days...). At the same time, he was a greatest historian of science, a person who played twice an outstanding role in the reestablishment of the Petrograd–Leningrad Mathematical Society. And all that was besides his own mathematical papers with first-class results in various branches of analysis. It is hard to believe that this was done by one person!

There is an extensive literature devoted to the life of V. I. Smirnov and his scientific, educational, and organization activity. At the first place, we mention the collective monograph<sup>1</sup> containing V. I.’s detailed biography and a deep analysis of his scientific work. But our aim here is to suggest the reader to see Vladimir Ivanovich in the eyes of his contemporaries.

We are grateful to A. M. Vershik for the idea of this paper’s organization, to E. N. Rytyn’ for providing us with the text of memoirs by E. K. Gorbunova, and also to A. A. Paletskikh and N. V. Rastegaev for their help in the transcript of the audio-record of M. S. Birman’s reminiscences.

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**Aleksandr Danilovich Aleksandrov (1912–1999), mathematician, Academician of USSR Academy of Sciences, the founder of the Leningrad school of “geometry in the large”, Rector of Leningrad University (1952–1964).<sup>2</sup>**

< . . . > when I think about him, his image arises clearly in my eyes, as if it were surrounded by the bright of his soul’s light, genuine kindness that combines sympathy with strictness, emotional softness with the strength and clarity of mind. This light of kindness was perceived by everyone who contacted him, always bestowed with the characteristic amicability of Vladimir Ivanovich’s cheerful sight. Light of joy and vivid interest in a person, in a scientific result, in a philosophical idea . . . The joy of work, of lecturing, of listening music . . .

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<sup>1</sup>*Vladimir Ivanovich Smirnov, 1887–1974*, 2nd extended edition, O. A. Ladyzhenskaya and V. M. Babich (eds.), Nauka, Moscow, 2006.

<sup>2</sup>Aleksandrov A. D., *Problems of science and the stand of a scientist: papers and speeches*. Nauka, Moscow, 1988, pp. 496–506.

Vladimir Ivanovich was an academic, a mathematical scholar. But at the same time his essence was that of a teacher, i.e., a person who teaches, no matter how – as a schoolmaster, a university professor, or a preacher.

<...> A teacher focuses on people. His purpose is spiritual enrichment, development of Man. A scholar conveys a scientific result, but a teacher tries, moreover, to make it as clear as possible. Surely, a scholar and a teacher are combined in some proportion in one person, and a good teacher is hardly possible without being a scholar, at least sometimes. Vladimir Ivanovich was an outstanding scholar and great teacher.

<...> His huge work on the “Course” clearly reflected the inborn traits of a genuine teacher. <...> He aimed at all possible improvements, never viewing the task fully accomplished. The professional integrity of Vladimir Ivanovich should all the more so be emphasized that in the 70s and 80s haste and negligence penetrated into educational literature, even authored by prominent scientists. In this respect “Course of Higher Mathematics” is not merely an outstanding scientific and educational treatise but also an example of high morality. Ultimately, the deepest essence of the notion of a teacher is ethical.

<...> Vladimir Ivanovich was a superb lecturer, a (if not the) best our mathematical presenter of this century. He did not decorate his lectures with peculiar word patterns, but the audience was enchanted inevitably. He delivered lectures with pleasure, with love to the subject and respect towards the audience, enjoying what he was presenting.

<...> Vladimir Ivanovich remained religious during his life, and being asked once by me about faith, he answered: “I simply believe, you know...” One might think that his temper, his activity, his entire personality manifested the position of a deeply believing Christian. This presumes a devoted service to people and dedication to their cause, with goodwill and perfectionism, without all-forgiveness (especially, he condemned time-servers), with the joy to live off despair and asceticism, with courage when it is required to confront the evil, misfortune, or suffering.

<...> Vladimir Ivanovich passed away, and nothing can replace his companionship, immersion in the atmosphere created by him. But happy are those who could ever commune with it. His image shines on us. Persons of his kind are called “Mahatma” in India.

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**Vasiliĭ Mikhaĭlovich Babich, mathematician, Head of a laboratory at St. Petersburg Department of V. A. Steklov Mathematical Institute (PDMI RAS), a leader of the Leningrad school of diffraction and wave propagation theory.**<sup>3</sup>

<...> He headed educational departments, Institute of Mathematics and Mechanics, but the word “administrator” did not fit him absolutely. His control was imperceptible, so to say. A faculty meeting lasting for more than half of an hour occurred rarely. <...> I give two examples. The first was recounted by Academician L. V. Kantorovich. A certain meeting of the Academic Council at Institute of Mathematics and Mechanics was considering an annual report, the work plan, and the issue of organizing a functional analysis conference. It started at 19:00 and finished at 19:45. All tasks were accomplished. Another example: at a meeting, V. I. Smirnov suggests something substantial as a chairman. “Are there any comments?” Somebody tells “Well, I’d like to tell something.” – “Fine. But do you suppose to support or to object?” – “I want to support.” – “No need then in your speech”...

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<sup>3</sup>Cited in accordance with “*Vladimir Ivanovich Smirnov, 1887–1974, ...*”, pp. 150–158.

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**Mikhail Solomonovich Birman (1928–2009), mathematician, Professor at St. Petersburg State University, a leader of the Leningrad school of spectral theory of operators.**<sup>4</sup>

<...> Vladimir Ivanovich was quite an imperturbable, balanced, and kind-hearted man and, without any special effort, he strongly influenced everybody who contacted him for whatever reason. Saying in a somewhat old-fashioned manner, he was quite gentleman-like. However, none of these positive features was over-exposed, none oppressed people <...>

[V. I.] was no stranger to an idea of Service, like in the Narodnik movement. He helped very many people and relieved the earthly existence of many, but the impression was that every time this was done not for one or another particular person but rather in accordance with this internal motivation, permanent concern both of professional affairs and of people. And in this respect, Vladimir Ivanovich was very indulgent, so to say, that is, he could help people independently of whether they deserved this or not quite, from a usual point of view <...>

Once, <...> during a break in our professional discussions, I told that, according to my perception, February Revolution had immediately resulted in general euphoria, the feeling of deliverance, and people had expected the coming of universal happiness; however, in reality it had led us elsewhere. Vladimir Ivanovich replied me rather seriously: “I did not expect anything good from the outset”.

<...> nobody among us can imitate Vladimir Ivanovich now, we were developed by a different time; <...> at some moments, as a consequence of difficulties in affairs or in personal life, the question used to occur to me: “Well, what would Vladimir Ivanovich have done in these circumstances?” Most often, the answer was that, simply, Vladimir Ivanovich would not get into the situation. I could not claim the same about anyone else among my elder colleagues.

<...> [A. A.] Fridman sympathized the revolutionary movement and participated in it to a certain extent, but once felt a kind of danger and asked <...> his comrade to take leaflets with revolutionary content (which he had been keeping) <...> and bring them somewhere. Vladimir Ivanovich complied with that request. I asked: “Well, Vladimir Ivanovich, thus you also sympathized revolutionary movement, did not you?” “Far from it, he replied, but my comrade asked me to do that and I did.”

<...> Vladimir Ivanovich’s five-volume “Course of Higher Mathematics” deserves a special mention. Without any exaggeration and pathos, the creation of such a Course is a heroic deed. <...> Thinking about other similar attempts, maybe, we can revoke that by Reed and Simon. But there is an important difference. Reed and Simon announced a program that eventually was accomplished barely half, whereas Vladimir Ivanovich finished his program completely.

<...> Vladimir Ivanovich had delivered all lecture courses, both general and advanced, viewed by him as necessary at the Department of Physics. However, when he transferred a course to some of his younger colleagues (I was among them), he did not interfere in the exposition any longer. A right “staff selection” was principal for him, and afterwards he trusted these people.

<...> Vladimir Ivanovich was a mysterious personality in a sense, because usual human foibles were alien to him, as if from the very origin. For instance, the issues of scientific priority never interested him. <...> It was clear that, for him, these matters

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<sup>4</sup>Video-record, October 2007.

were unessential, and his attitude towards science did not reduce to his personal role in science. In the same way, his attitude towards individuals was formed not on the basis of his perception of these specific persons, but was illuminated by some other, external glow and simply matched certain general beliefs of his about the way of treating people, about the nature of Man and God.

<...> However strongly [V. I.] loved science and however large was his impact on it, as a personality, a man he was greater than as a scientist. It should be said here that the emphasis is on the word “greater” rather than “smaller”. Not that he was a smaller scientist than a person; he was a greater person than a scientist.

<...> it can be claimed that, for the Mathematical Department, Vladimir Ivanovich was the main actor. This is not an exaggeration, nor is it an understatement of the role of other remarkable and renown scientists who glorified the mathematical department at that time.

<...> A trait we cannot avoid to view as somewhat paradoxical and wonderful is that he [V. I.] was able to communicate with authorities of various level and various quality in such a way that they did not regard him as an opposing force but definitely respected him, took account of his viewpoint, and often made concessions. Therefore, to my mind Vladimir Ivanovich’s general life attitude was not only decent and very attractive, but even successful pragmatically in a sense.

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**Alekseĭ Nikolaevich Bogolyubov (1911–2004), mathematician, Corresponding member of National Academy of Sciences of Ukraine.**<sup>5</sup>

<...> Vladimir Ivanovich lived at that time in Komarovo near Leningrad. In that dacha village, I was amazed by tall green fences hiding palaces of Leningrad high officials. The feeling was that people who lived behind the fences had isolated themselves from the society in the fear that someone from the outside would see and, maybe, judge their private life. The street where V. I. Smirnov lived was quite the opposite. Everything was wide open there. The scientists and their families, who dwelt in that street, had nothing to hide and nobody to hide from...

<...> Vladimir Ivanovich had deepest knowledge in history and in the history of science. His papers dealing with the latter are so precise in all details and facts that, in most instances, can serve as reliable sources of references...

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**Elena Georgievna Bonner (1923–2011), human rights activist, the wife of Academician A. D. Sakharov.**<sup>6</sup>

<...> The summer of 1972 was devoted to collecting signatures under the petition about amnesty and abolition of death penalty. <...> among all colleagues of Andrei [Sakharov] to whom we addressed at that time, I remember nicely a scientist of senior generation, mathematician, Academician Vladimir Ivanovich Smirnov. This was not for the reason that his home was the only one where we were fed, and not because of a long and quiet conversation, but because of the kindness and deepest attention with which he looked at Andrei and listened to him. I do not know how much Andrei had communicated with him before, but it seemed to me during this, only one, meeting with V. I. that he had known Andrei well and for long, and understood the intrinsic motivation of his acts...

<sup>5</sup>Cited in accordance with: *Vladimir Ivanovich Smirnov, 1887–1974, ...*, pp. 158–161.

<sup>6</sup>Bonner E., *Before the diaries*, Znamya, 2005, No. 11, pp. 62–128.

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**Anatolii Moiseevich Vershik, mathematician, Head of the Laboratory of representation theory and dynamical systems at PDMI RAS<sup>7</sup>**

Every contact with V. I., even of purely business nature, is recollected as a contact with some wonderful, vanishing world to which he pertained. His manner to communicate, his choice of words in a conversation, his behavior – all was so full of serenity, humor, purity; in short, so full of something distinct from what we were accustomed to. I give an account of only two such contacts.

Once, when I was a graduate student, I was summoned to the Department for a report. I was sure that the matter was a usual routine and, when I arrived at the prescribed small office (there was nobody near it) and looked inside, I saw V. I. sitting alone at the desk. I apologized (I had had only few contacts with him before) and said that, presumably, I had entered a wrong door. “No, to the contrary, he said, you’ve come just to me”. “How can it be, I thought, that Academician Smirnov would be busy with such trifles?” But it turned out that he had accepted to be the chairman of the checking commission; he invited me to take a seat and began to interview me about my thesis. Though the subject was fairly far from V. I.’s interests (informally, my supervisor was V. A. Rokhlin), he posed several sharp questions. In particular, he asked me about the content of my Candidate examination. I was totally confused: these exams were held (if at all) in the manner of a pure formality. At that point, unexpectedly, V. I. began to retell, placidly and in great detail, how that had looked like in his time in similar cases, what had been the material of his exams and how he had passed them. Surely, I do not remember the list of books and papers he had had to report back; but this was interesting indeed and, on the other hand, this seemed to be a well-prepared lesson given quite softly.

Some years later, I came to his dacha in Komarovo to ask him to submit to Doklady our joint note with L. D. Faddeev on nonholonomic mechanics. Another reason for my visit was that, some time before, an assistant of V. I. had asked me to write several pages on this subject for the new edition of V. I.’s five-volume Course, to the chapter on the calculus of variations. First, V. I. asked me to describe what precisely I wrote for his Course, and then passed to the content of the note. He perceived the material as absolutely novel for him. Having finished with questions and having signed the note, he, again somewhat unexpectedly for me, started to talk about the relationship of “new” and “old” in mathematics and to recollect how they (presumably, with A. A. Fridman and other fellow students) had tried to “keep pace” with the new things. At this moment I started to nod intensely, saying that, probably, the same happened with all generations of mathematicians. < . . . > V. I. continued, smiling: “We were strongly interested in the new French mathematics at that time, especially in recent papers by Poincaré, and considered some of our teachers (very strong mathematicians) to be hopelessly archaic – precisely as, probably, you view us”. (That’s what never was the case of me and my friends, and, of course, V. I. knew this perfectly.)

In conclusion it should be noted that the biography of V. I. and his numerous commentaries to mathematical papers and books show that the striving not to miss something new distinguished this remarkable scientist and personality during all of his life.

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<sup>7</sup>Compiled especially for this article.

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**Ekaterina Konstantinovna Gorbunova (1909–2006), Head of a laboratory at VNIIRPA<sup>8</sup>; a daughter of V. I. Smirnov’s first wife.<sup>9</sup>**

< . . . > In 1924, in Winter, he [Ya. D. Tamarkin] crossed the border with the aid of “smugglers”. Everything was prepared in advance beyond the border, and soon he arrived at America.

Vladimir Ivanovich was unaware of those plans and was greatly surprised, all the more so that [Tamarkin’s] wife, 5 years old son, and mother-in-law remained here. The mother-in-law tried to obtain a visa for Finland (where she had relatives) to go there with the grandson. Yakov Davydovich’s wife tried to use the same “smugglers” to escape but they were intercepted at the border and she was jailed and put in a cell with thieves and murderers. Her liberation brought so much trouble to Vladimir Ivanovich! He was literally worn out of going to authorities. Finally, she was released, in terrible condition < . . . >. But Yakov Davydovich often wrote (one year sufficed for him to forget our life) that the family should manage to arrive as soon as possible, that respectable people did not invite him and already looked at him disapprovingly. And Vladimir Ivanovich continued to visit officials, again and again. Finally, thanks God, he was able to procure a permission for Yakov Davidovich’s wife to leave. That’s how he was doing good for people, difficult to count all of them. And in 1937, he cared of and safeguarded so many!!

< . . . > In 1947 the Government gave dachas in Komarovo to Vladimir Ivanovich and other academicians. Vladimir Ivanovich joked that the dachas were distributed in accordance with an academician’s rank: the 1st rank academicians were accommodated in the middle of the village, while those of the 2nd rank were settled closer to the borders. Vladimir Ivanovich’s dacha was the first at entrance. . .

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**Daniil Aleksandrovich Granin (1919–2017), writer.<sup>10</sup>**

< . . . > Once I asked Academician Smirnov to receive me. I was to come to him at the dacha at noon. Good fortune that, coincidentally, I arrived on time. Vladimir Ivanovich had already been standing on the road and waiting me. He came out to meet me. “Tender emotion of normal things”, you would say? But I thought at that time: “Why it occurs to nobody of my and younger generations to come out to meet a guest? We would be hospitable and welcoming, but scarcely could we guess that respect might be shown also in this way. How often we do miss such possibilities.”

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**Viktor Abramovich Zalgaller, mathematician, Professor at Leningrad University; lives in Israel since 1999.<sup>11</sup>**

< . . . > We attended his [V. I.’s] general course on functions of a complex variable. He started usually with basic examples and exposition of classical theorems, and then changed the timbre of voice and, during the last ten minutes of each lecture, presented thrice as much as he had exposed before that moment; moreover, various generalizations

<sup>8</sup>VNIIRPA: All-Union Scientific Research Institute of Radio Broadcasting and Acoustics.

<sup>9</sup>From the personal archive of E. I. Rityn’.

<sup>10</sup>Granin D., *Head over heels for a month*. Collected works, v. 2, “Khudozh. lit.”, Leningrad, 1979, pp. 369–469.

<sup>11</sup>Cited in accordance with: *Vladimir Ivanovich Smirnov, 1887–1974, . . .*, pp. 168–169.

were traced and the physical sense was preserved. All this was done in a subtly kind manner. Every one among us was able to choose himself the point up to which the matter did not elude him, and the ambition of nobody was humiliated in a slightest form. This was an amazing way of lecturing. It seemed to me at the time that I comprehended Vladimir Ivanovich’s tricks. But when I came back to the university after the war, four years later, and met V. I. Smirnov, he called me by the first name with the patronymic and started to recall one after another all my fellows (even those I did not remember myself). So, I understood that there was a secret in his teaching: however numerous we were, he perceived everyone individually, as a personality. This was absolutely striking in the mass training...

<...> V. I. Smirnov was a wise man and had a perfect ear for music and not only. He had that perfect ear for righteousness which is called crystal-clear conscience. Together with kindness and the solid equability of behavior, all these qualities were as natural as breath for Vladimir Ivanovich. For the Leningrad mathematical community, he was a saintly person. Like with a tuning fork, the collective conscience of Leningrad mathematicians was adjusted via his presence...

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**Vladimir Nikolaevich Koshlyakov (1922–2009), specialist in theoretical mechanics, Academician of National Academy of Sciences of Ukraine; the son of N. S. Koshlyakov, a mathematician.**<sup>12</sup>

<...> He [V. I.] visited our family feasts and parties, during which people often played *vint*.<sup>13</sup> <...> By the evidence of experts, Vladimir Ivanovich played *vint* masterfully and with inspiration. Invariably vibrant and witty, he always was what is called life and soul of the party. In these meetings, he often played music. Excellently playing the piano, Vladimir Ivanovich loved, knew deeply, and understood classical music. He revered Mozart. He called the music of Don Giovanni “mysteriously brilliant” ...

<...> The Patriotic War, which brought countless disasters to the Soviet people, stroke our family with additional pain, having separated us from the father for nearly ten years. I cannot forget the generous help and support of Vladimir Ivanovich and his wife Elena Prokopievna at that hard time! ...

<...> During his long life, this extraordinary man performed many kind, wise, and useful deeds. They are inseparable from him, as he himself is inseparable from them.

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**Ol’ga Aleksandrovna Ladyzhenskaya (1922–2004), mathematician, Academician of USSR Academy of Sciences, a leader of the Leningrad school of partial differential equations.**<sup>14</sup>

<...> fortune granted me the companionship of Vladimir Ivanovich during roughly 27 years. Should I have never met V. I. Smirnov, my life would have been totally different. The point is that I lost my father early – he was arrested in 1937, when I was 15. Deep friendship linked me with my father. Vladimir Ivanovich replaced him. This could only happen because of some wonderful intrinsic resemblance between V. I. Smirnov and my father. At the beginning, this resemblance astonished me so much that all features of

<sup>12</sup>Ibidem, pp. 177–181.

<sup>13</sup>“Russian whist”, a complicated card game.

<sup>14</sup>Ibidem, pp. 181–187.

Vladimir Ivanovich seemed quite familiar to me from my birth. But this was only at the beginning. The longer I interacted with him, the deeper was the understanding that I was learning something permanently from him. That's true, V. I. Smirnov was a teacher for most of the people who contacted him at least once. I watched him communicating with prominent writers, musicians, theorists in literature, with very clever and unsentimental people. After a meeting with Vladimir Ivanovich, something dawned up on all them, a sort of gladness and delight...

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**Boris Mikhailovich Makarov, Professor at St. Petersburg State University.**<sup>15</sup>

<...> when in the 1930's the decision was taken to transfer the Academy of Sciences to Moscow, <...> the university lost very many scientists who also moved to Moscow, and some official at the university (maybe, a vice-rector) invited V. I. especially for a conversation to cajole him: "Well, could you please not to resettle to Moscow, we'll provide you with a flat, we know your not quite satisfactory situation". So, he [V. I.] obtained then an apartment in Petrogradskii island. But he said sometimes: "Well, the matter of which that person was not aware is that I would have never moved from Leningrad in any case" ...

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**Galina Pavlovna Matvievskaia, historian of mathematics, orientalist, Academician of Uzbekistan Academy of Sciences.**<sup>16</sup>

<...> Vladimir Ivanovich's method of instruction in the techniques of scientific work was his personal example. He insisted that any author had to treat the work quite seriously and present the results with extreme care. Having fine feeling in literary style, he was an excellent editor and, by a couple of corrections, was able to make precise seemingly remediless phrases.

<...> There is no doubt that many of us happened to avoid a bad action by looking involuntarily at ourselves in Vladimir Ivanovich's eyes at some moment. Communication with him made it totally impossible to be dishonest in the work. I remember forever the feeling of shame because of some lack of knowledge at an examination, though Vladimir Ivanovich never reproached us, he simply was upset ...

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**Georgii Ivanovich Petrashen' (1914–2004), mathematician, Director of Leningrad Department of V. A. Steklov Mathematical Institute (1957–1976)**<sup>17,18</sup>

<...> he [V.I.] always impressed his counterparts by the ability to quickly penetrate into the essence of a study alien to him ... Usually, within a short while, he started to comprehend the matters in question at least as well as the author himself, and even better. This made his remarks and criticism extremely valuable. But in certain cases his advice resulted in a total revision of the paper under discussion, so that in fact

<sup>15</sup>Video record, May 2008.

<sup>16</sup>Cited in accordance with: *Vladimir Ivanovich Smirnov, 1887–1974, ...*, pp. 187–190.

<sup>17</sup>Petrashen' G. I., *V. I. Smirnov, the founder of the Leningrad mathematical school in diffraction and propagation of waves*, Vestnik LGU, ser. mat., mekh., astron., 1975, No. 1, pp. 16–21.

<sup>18</sup>Cited in accordance with: *Vladimir Ivanovich Smirnov, 1887–1974, ...*, pp. 192–194.

V. I. Smirnov played the role of a co-author – but always covertly. Such an activity fully revealed a certain characteristic of his as a scientist and personality, namely, the wish to stay in the background even in the cases where his interference was decisive for clarifying the essence of a problem. A result itself, if it was fine or useful practically, was the main reason of his delight; the issue of the authorship was always resolved in favor of the person who asked V. I. for help.

< . . . > Without any exaggeration, we can say that the entire teaching of mathematics at the Physical Department of Leningrad State University was permeated by the mind and will of one person, V. I. Smirnov.

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**Sergeĭ L’vovich Sobolev (1908–1989), mathematician, Academician of USSR Academy of Sciences, the founder of several research fields, an organizer of the Siberian Branch of USSR Academy of Sciences.**<sup>19</sup>

< . . . > He loved his science passionately and manifested tender parental care towards everyone viewed by him as a future scientist. His erudition was amazing. In personal communication, I did not ever meet anybody more charming and attractive than V. I. Smirnov.

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**Nikita Alekseevich Tolstoĭ (1917–1994), physicist, Professor at Leningrad State University; a son of the writer A. N. Tolstoĭ.**<sup>20</sup>

< . . . > With his dignity, Vladimir Ivanovich did not fear to walk the edge of the abyss. I remember quite well the story how, in some terrible times, he was requested to support by his evidence some prejudged wrong case against a prominent scientist. When V. I. Smirnov said firmly and clearly all what he knew and thought indeed about that person, he heard after some chilling silence: “And you are a very bold man, Vladimir Ivanovich!”

Should I have been an expert in heraldry asked to create a blazon for V. I. Smirnov, I would have certainly placed there, besides two crossed integrals on the azure background, this motto: “And you are a very bold man, Vladimir Ivanovich”, with the factorial sign at the end.

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**Dmitriĭ Konstantinovich Faddeev (1907–1989), mathematician, Corresponding member of USSR Academy of Sciences, a creator of the homological algebra.**<sup>21</sup>

< . . . > Regularly, each two weeks, Vladimir Ivanovich organized wonderful piano recitals in his apartment, where arrangements of chamber and symphonic music were played – in a very wide range, both classical and more recent compositions. Me and Vladimir Ivanovich played Beethoven in four hands. It is hard to imagine something more pleasant than these parties. Usually, we played with great fascination, understood each other “at a glance”, and always felt simultaneously where it was necessary to slow, or accelerate, or strengthen. Though we were not professional musicians, we managed to

<sup>19</sup>Ibidem, pp. 201–205.

<sup>20</sup>Ibidem, pp. 205–206.

<sup>21</sup>Ibidem, pp. 207–208.

perform fairly well. The audience <...> was pleased at least at the same level as the performers.

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**Viktor Petrovich Havin (1933–2015), mathematician, Professor at St. Petersburg State University, a leader of the Leningrad school of mathematical analysis.**<sup>22</sup>

<...> As to the caliber of V. I.'s personality, I treat him as a man of Renaissance in accordance with the diversity and depth of his knowledge, especially the professional knowledge. This was an amazing professional broadness, moreover, he knew professionally very much in music, knew and was able to do. He knew languages, including ancient. In general, he was very deep in all subjects. And he was deeply religious. <...> He was strict in adhering to his faith, also at the time when this was not encouraged (to put it mildly). Surely, this inspired deep respect of everybody who had known him. Nothing superficial or ostentatious was in that, no way.

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**Leonid Aleksandrovich Khalfin (1932–1998), physicist, Professor, a researcher at PDMI RAS.**<sup>23</sup>

<...> I was very lucky – I attended <...> the theory of functions of a complex variable delivered to the entire class in the Big Physics Auditorium. Frankly speaking, I could not imagine that Vladimir Ivanovich had started to deliver the same course in 1925. His presentation was so bright and enthusiastic as if it would have been done for the first time. The impression was incredible. It could only be compared to a recital of an outstanding piano player. I remember that, before the beginning of the lecture, he warmed up his hands precisely as pianists do that. It is impossible to convey this impression, much as the impression of good music.

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**Evgeniĭ L'vovich Schwartz (1896–1958), writer, dramatist, and scenarist.**<sup>24</sup>

<...> Vladimir Ivanovich Smirnov is among the most attractive persons. He possesses innate sincere loyalty, does not pile into fight, unlike some embittered academicians <...> But in no way is he sly, nor even evasive, unlike usual people of similar mental constitution. He intercedes perpetually for somebody and does not escape university battles and struggle. <...> But he fights in his own manner, honestly, without squeal.

<...> The music he is fond of is familiar to him up to nuances. He learned to play piano without a teacher. But when he played in four hands with Rabinovich, Nikolai Semenovich, a person steely firm in his field, that one was surprised how Vladimir Ivanovich understood Mahler.

<...> Almost every Saturday during the dusky period of my life in Komarovo, starting with the Fall of 1949 and till 1954, a festive evening used to come. It usually was announced from Smirnov's dacha: "Music today at 7 p.m." <...> on the chair, he [V. I.] put a thick music book (apparently, this was Beethoven's sonatas) because of his low growth. Tall and thin Faddeev was just comfortable. From the opening bars, the players plunged in music like in whater, like in a medium changing their properties

<sup>22</sup>Video record, May 2008.

<sup>23</sup>Cited in accordance with: *Vladimir Ivanovich Smirnov, 1887–1974, ...*, pp. 208–211.

<sup>24</sup>Schwartz E. L., *Telephone book*, Iskusstvo, Moscow, 1997.

deeply. It did not seem funny that Vladimir Ivanovich now hopped, now drove in his head, now reclined it upwards solemnly. And Dmitriï Konstantinovich wiggled now and again.

<...> He [V. I.] is totally deprived of this old wives' confidence, usual also for many scientists, that they have the understanding in all domains.

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**Adolf Pavlovich Yushkevich (1906–1993), historian of mathematics, Head of a sector at S. I. Vavilov Institute for the History of Science and Technology of the Russian Academy of Science.**<sup>25</sup>

<...> During the work with him [with V. I.], at the first place I was totally amazed by his exceptional erudition and unmistakable memory. I already knew from him that, for instance, he had dictated big portions of his five-volume “Course” directly to the typist (surely, after having thought them over), with instructions about the blank space to be left for formulas. Then I realized that his memory also retained wide information about the history of mathematics. <...>

Another typical feature pertained to the manner of presentation. Vladimir Ivanovich had a rare gift to shortly and clearly explain difficult mathematical ideas, showing their essence and discarding secondary details. <...> This way, we worked twice a day for several hours, and, I must confess, I used to get tired earlier though I was nearly 20 years younger than him.

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**František Janouch, Czech and Swedish physicist, political writer, member of the Presidium of Czech Academy of Sciences; alumnus of the Physics Department, Leningrad State University.**<sup>26</sup>

<...> Professor Smirnov was the best university teacher I ever met. His lectures were distinguished not only for mathematical rigor and elegance. Smirnov delivered his lectures vividly, he knew how to fascinate the audience. He was an actor, a performer, in whose presentation mathematics ceased to be a mere collection of axioms, theorems, proofs, and calculations. In Professor Smirnov's lectures, mathematical functions came to life, acquired their destiny, survived their own misfortunes and accidents, allowed calculation of an integral or solution of a differential equation. In his lectures, Smirnov always experienced anew the entire history of mathematics, its difficulties, its achievements. He was able to transfer to the audience his enthusiasm or disappointment and, above all, his love to science.

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<sup>25</sup>Cited in accordance with: *Vladimir Ivanovich Smirnov*, 1887–1974, . . . , pp. 211–215.

<sup>26</sup>Ibidem, pp. 218–222.