

Lev Kudryavtsev at MIPT



November 25,
1946 by resolution
of the Council of
Ministers of the
USSR, the Faculty
of Physics and
Technology (FTF)
of Moscow State
University was
created





Boris Nikolaevich Delaunay
Corresponding Member of the USSR
Academy of Sciences - the first head of
the Department of Higher Mathematics
of the Physics and Technology Faculty
(1947-1948)





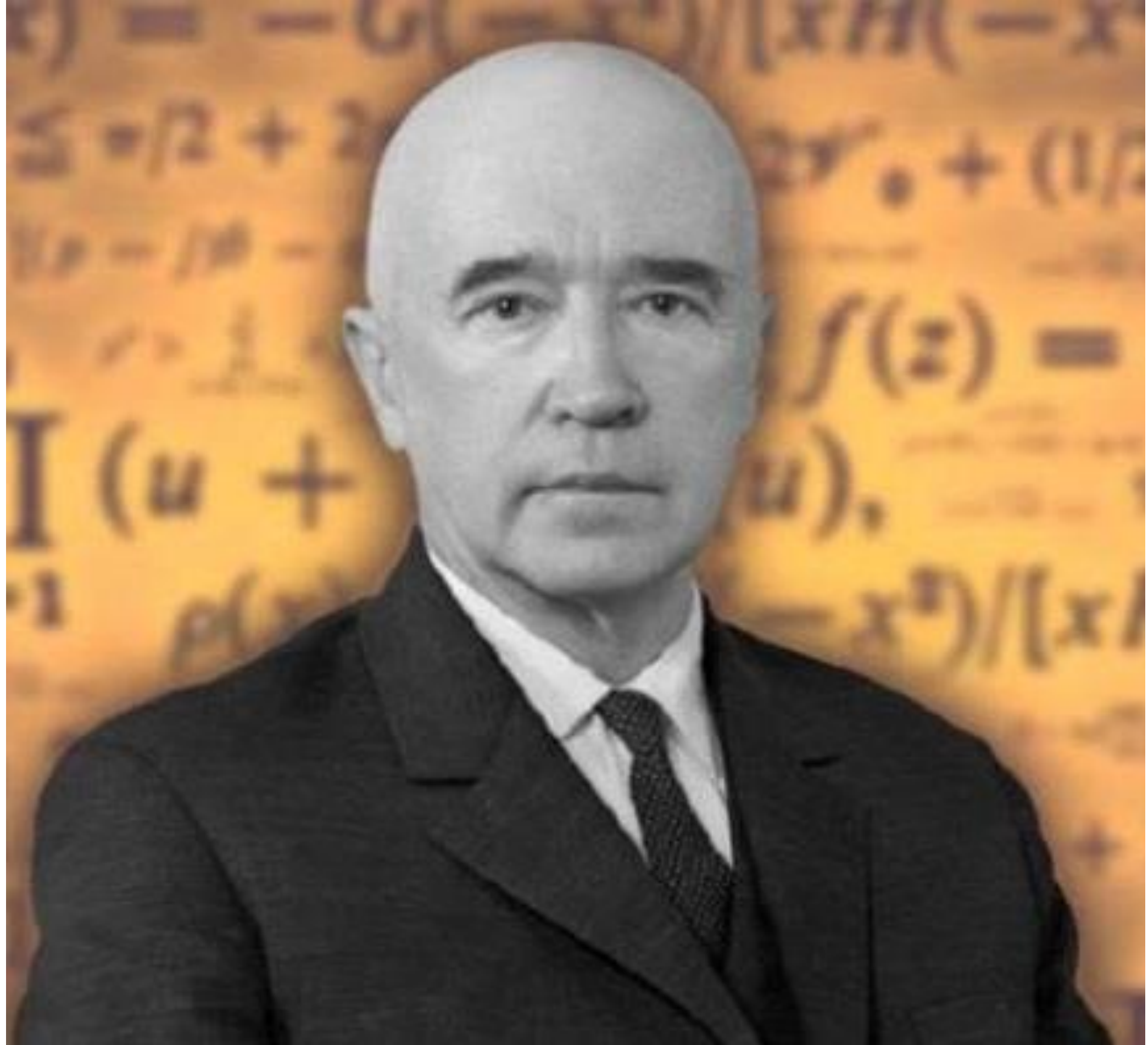
Mikhail Alekseevich Lavrentyev,
Academician of the USSR Academy
of Sciences, Head of the
Department of Higher Mathematics
of the Physics and Technology
Faculty(1948-1952)





Sergei Mikhailovich Nikolsky,
Academician of the USSR
Academy of Sciences, Head of
the Department of Higher
Mathematics, MIPT(1952-1954)





акад. И.Г. Петровский

Ivan Georgievich Petrovsky,
 academician of the USSR Academy
 of Sciences, hero of Socialist
 Labor, laureate of two Stalin Prizes

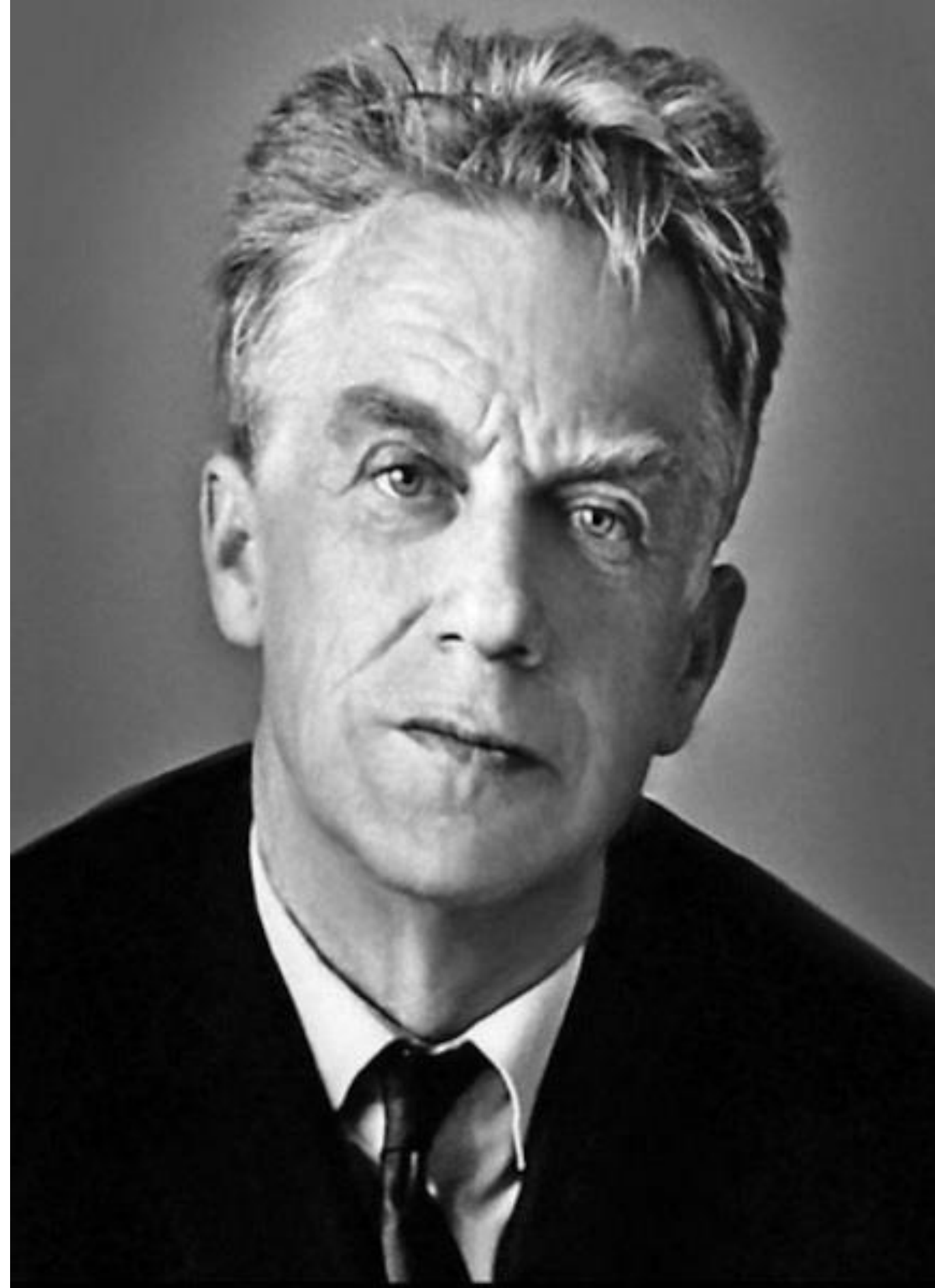




проф. А.А. Дородницин

Anatoly Alekseevich Dorodnitsyn
Academician of the USSR
Academy of Sciences and the
Russian Academy of Sciences.





Sergey Lvovich Sobolev.
Academician of the USSR
Academy of Sciences, Hero of
Socialist Labor. Laureate of three
Stalin Prizes and the USSR State





Ilya Nesterovich Vekua
Academician of the USSR
Academy of Sciences, later
president of the Academy of
Sciences of the Georgian SSR.





Olga Arsenyevna Oleynik later
Academician of the Russian
Academy of Sciences



О.А. Олейник



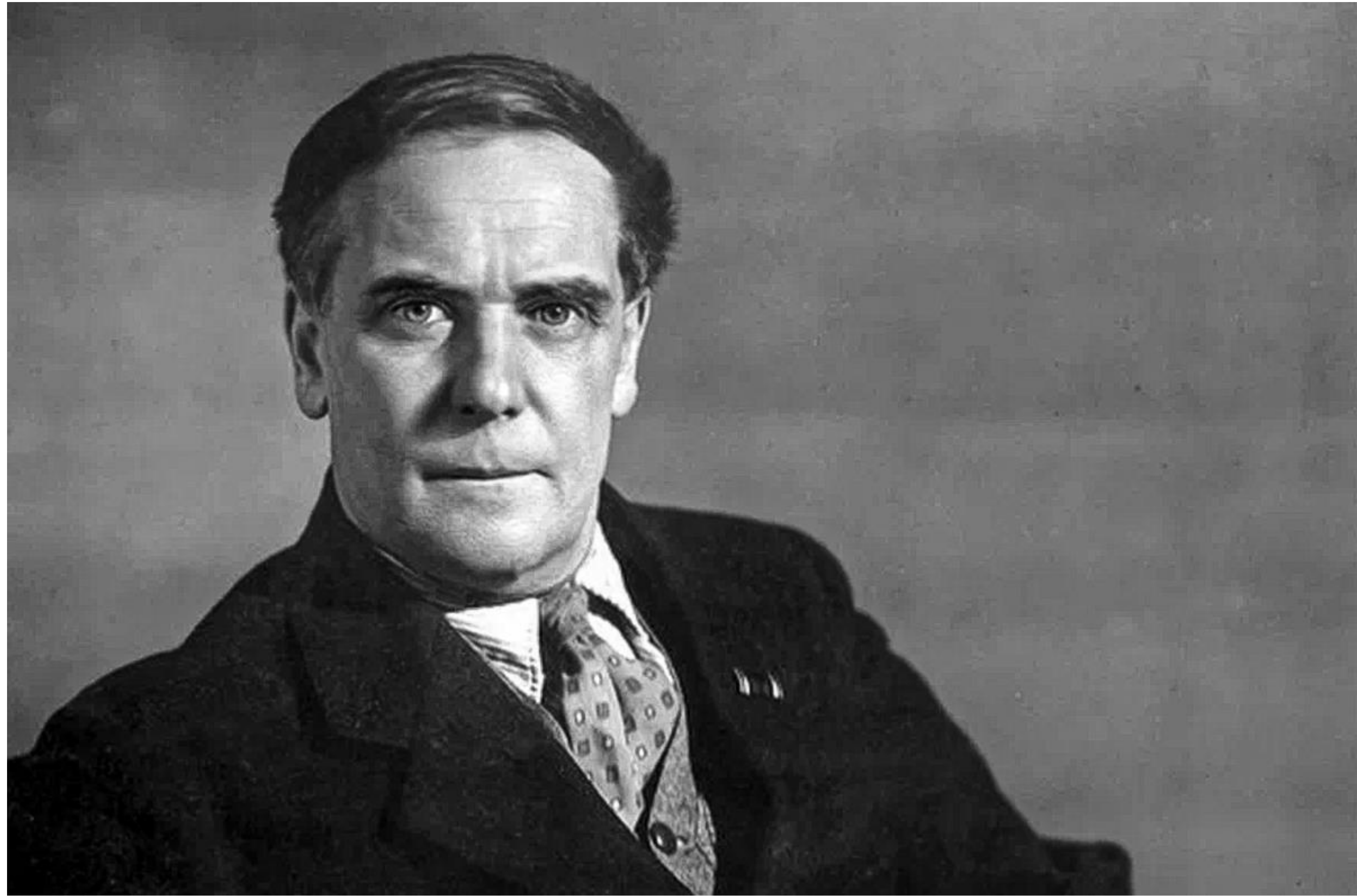


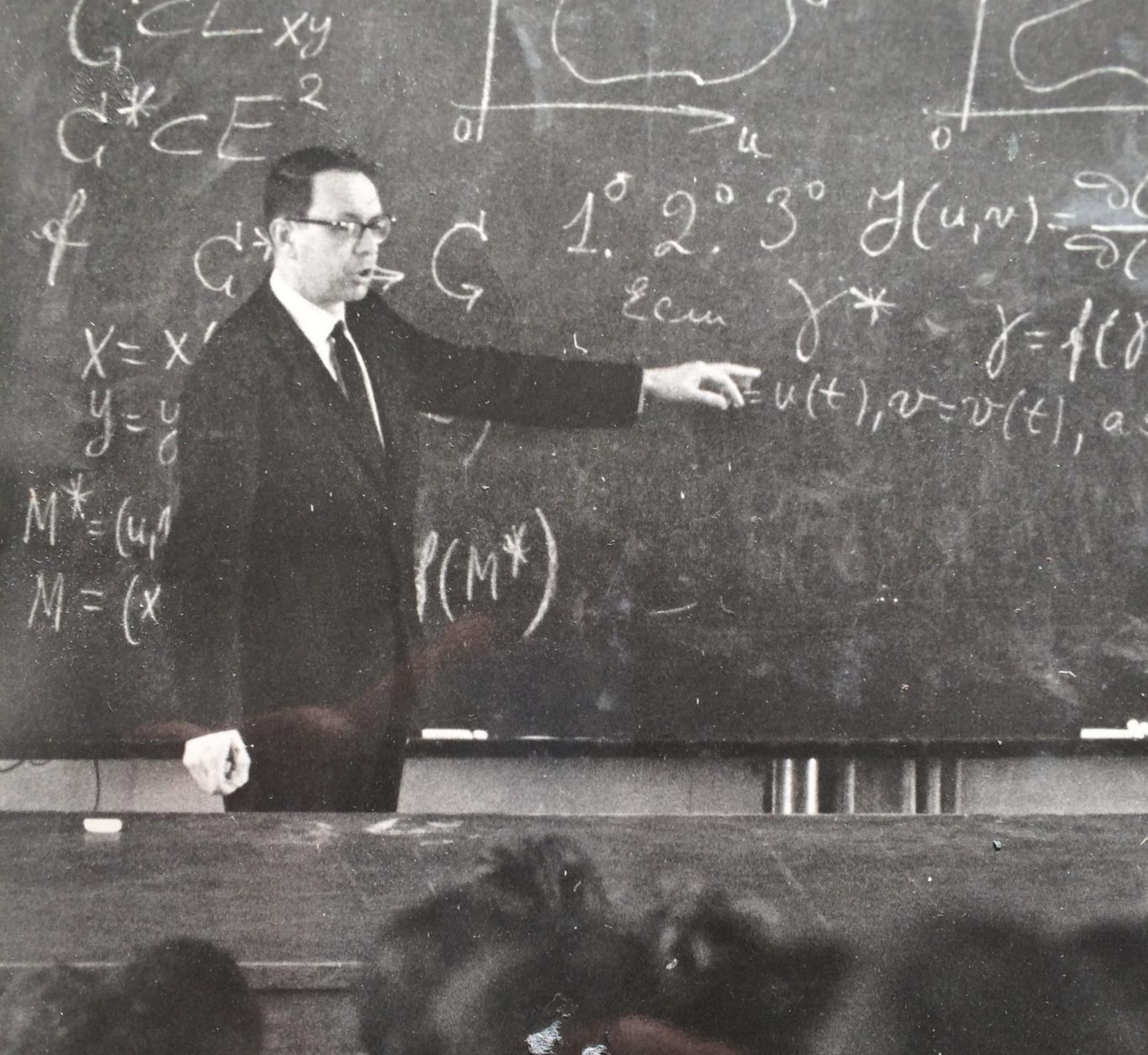
In 1947 Lev Dmitrievich Kudryavtsev was invited to work at the Department of Higher Mathematics of the Faculty of Physics and Technology of Moscow State University as an assistant



Phystech principles

- 1. Careful selection of the most gifted and creatively minded applicants.**
- 2. Direct participation of leading scientists in teaching students.**
- 3. Individual approach to students.**
- 4. Educating students in an atmosphere of technical research using the best laboratories in the country.**





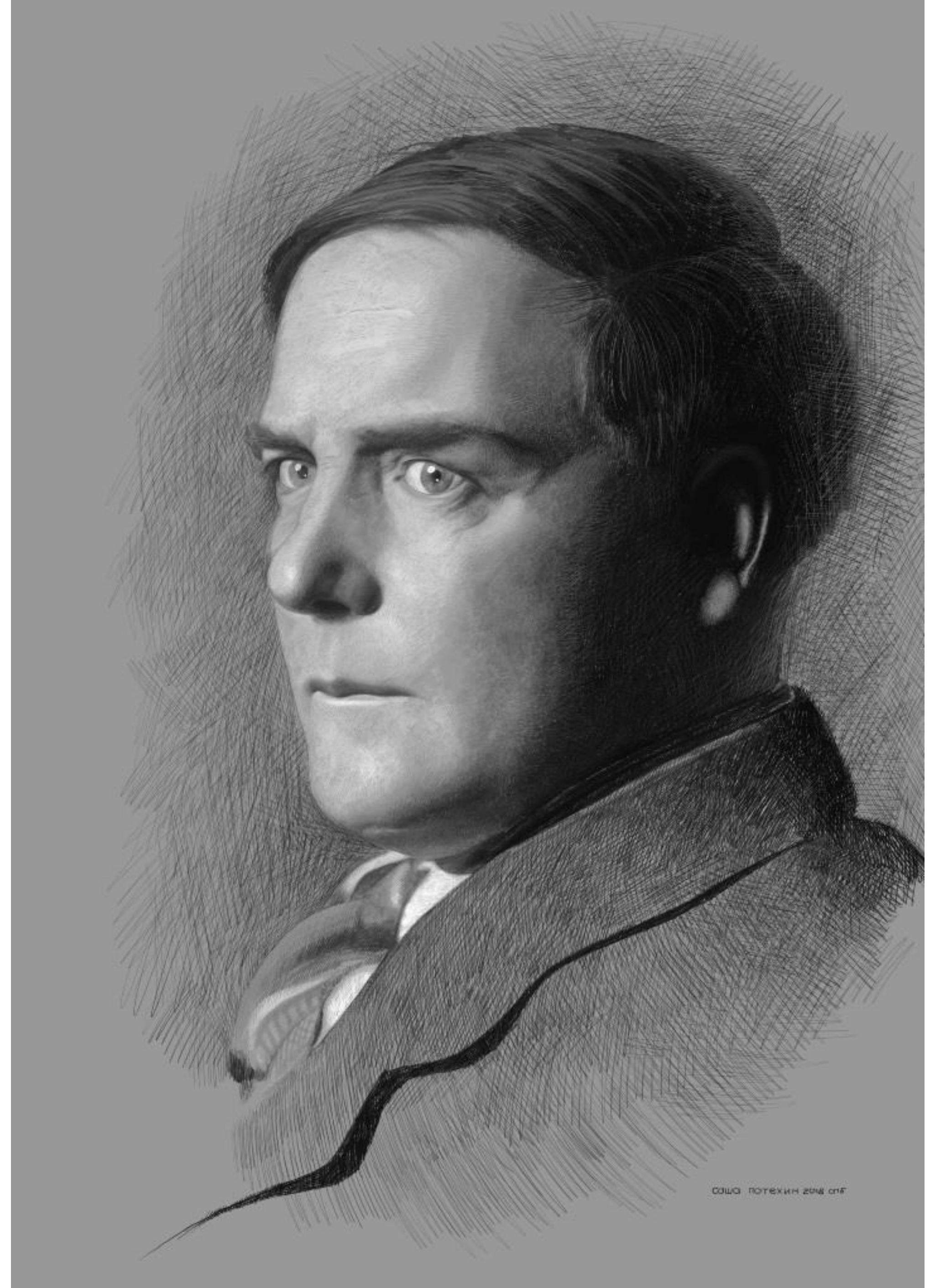
The idea of establishing the Faculty of Physics and Technology, and then the Institute of Physics and Technology captivated young enthusiasts. They got together, sat for days on problems, chose the most interesting ones, and created new ones.

Lev Dmitrievich
brought the spirit
of enthusiasts of
the early years to
Phystech, spirit of
creativity and
complete
dedication



The formation of Phystech was not easy.

In 1949-1950 The FTF was partially disbanded. In January 1950 founder of Phystech, academician P.L. Kapitsa was suspended from work with the wording “For lack of teaching load.”



A group of academicians, incl. P.L. Kapitsa, N.N. Semenov, S.A. Khristianovich turned to Aviation Lieutenant General I.F. Petrov asking for help.

I.F. Petrov got an appointment with I.V. Stalin. ...After listening to my report, Stalin said: "Why are we going to restore the faculty that we just dissolved? Let's create a new institute..." - from the book by I.F. Petrov "Aviation and all life." In 1952 MIPT appeared, the first rector of which was General I.F. Petrov.



Lev Dmitrievich
Kudryavtsev headed the
department of higher
mathematics at MIPT from
1954 to 1989.



Lev Dmitrievich
carefully selected the
teachers of the
department, he
managed to create a
friendly and cohesive
team, an atmosphere
of scientific creativity





*Lev Dmitrievich
organized
enormous and
fruitful
methodological
work of the
Department of
Higher
Mathematics*



*Lev Dmitrievich
talks with the first
rector of MIPT
Ivan Fedorovich
Petrov*



Lev Dmitrievich together with lecturers Khurshid-Khanum Karimova and academician Vasily Sergeevich Vladimirov



*Lev Dmitrievich
with the
professor S.A.
Telyakovsky*



1964, Lev Dmitrievich takes an exam in mathematical analysis from first-year student Natasha Kirova, currently professor, director of research at the Laboratory of Solid State Physics of the University of Paris-Sud



Lev Dmitrievich together with S.M. Nikolsky and O.M. Belotserkovsky



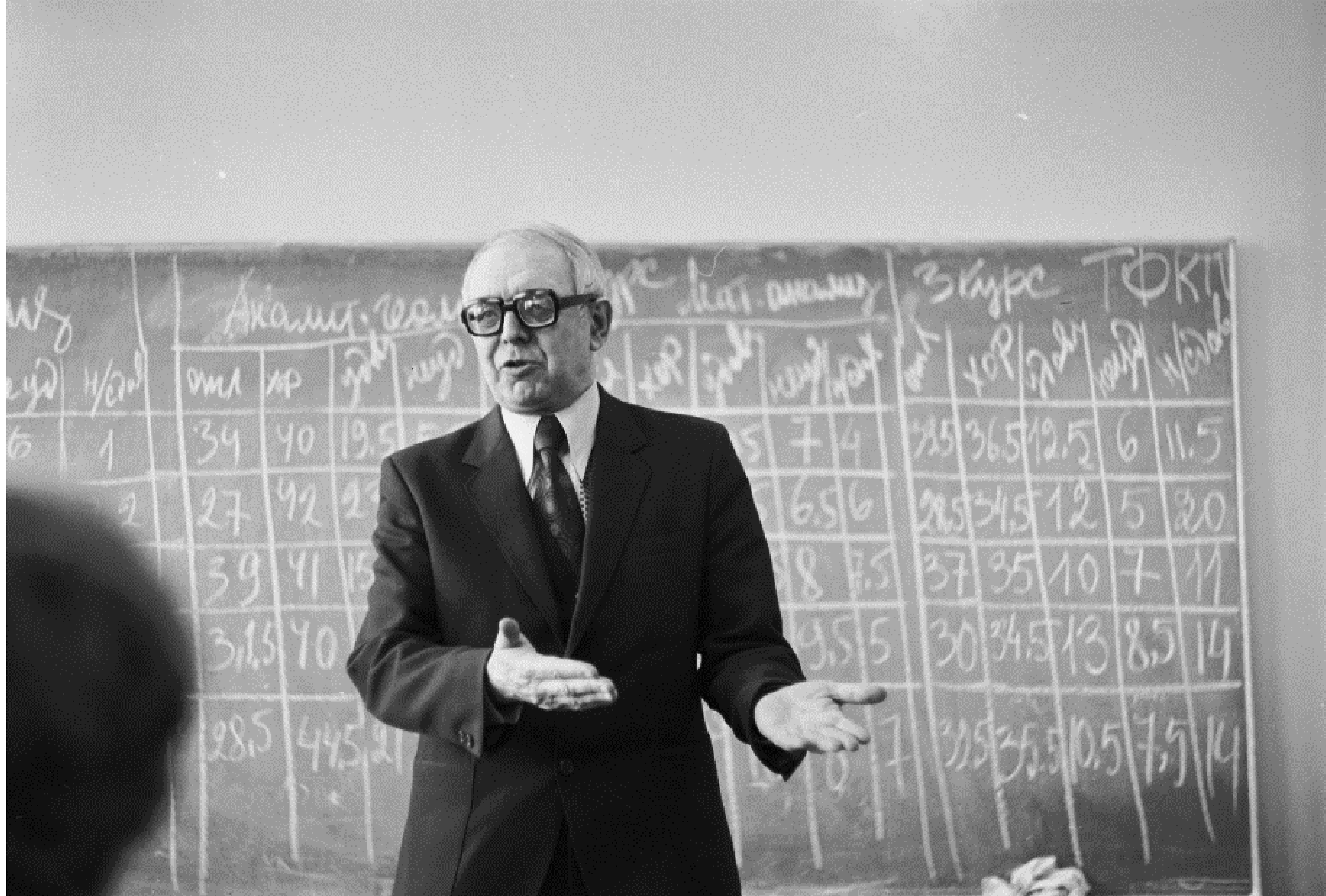
Lev Dmitrievich holds
a meeting with the
rector of MIPT O.M.
Belotserkovsky and his
deputies M.I. Shabinin
and A.D. Kutasov



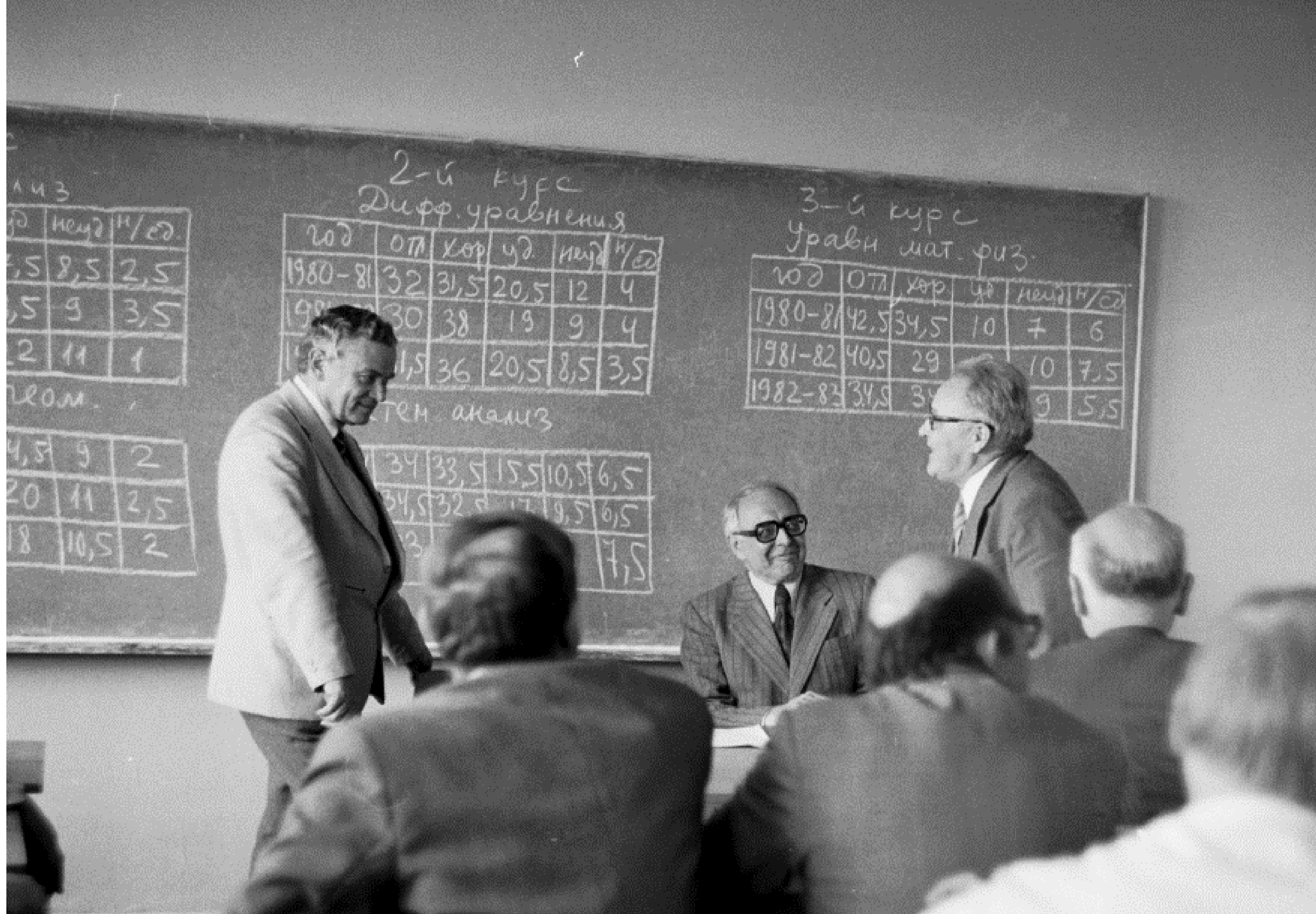
Lev Dmitrievich with D.V. Beklemishev and A.D. Kutasov



Lev Dmitrievich holds a meeting of the department



Lev Dmitrievich holds a meeting of the department



Lev Dmitrievich holds a meeting of the department





A.A. Bolibrukh speaking





Lev
Dmitrievich paid
great attention to
distance learning

1980 год, Таллинн. С ученицей
к. ф.-м. н. Т.С. Пиголкиной готовит
телевизионную лекцию по математике



The department staff not only worked together, but also actively participated in cultural events



The rector's office also actively participated in these cultural events of the department.

поздравляем



с днем
рождения!

он у штурвала
30 лет —
корабль
плывет,
не зная бед





Poster "The Lion's Share or Episodes from Leo's Life Abroad"



*MIPT Rector
O.M.
Belotserkovsky
congratulates Lev
Dmitrievich*

Flowers from N.N.
Kudryavtsev - rector of
MIPT and former
student of Lev
Dmitrievich

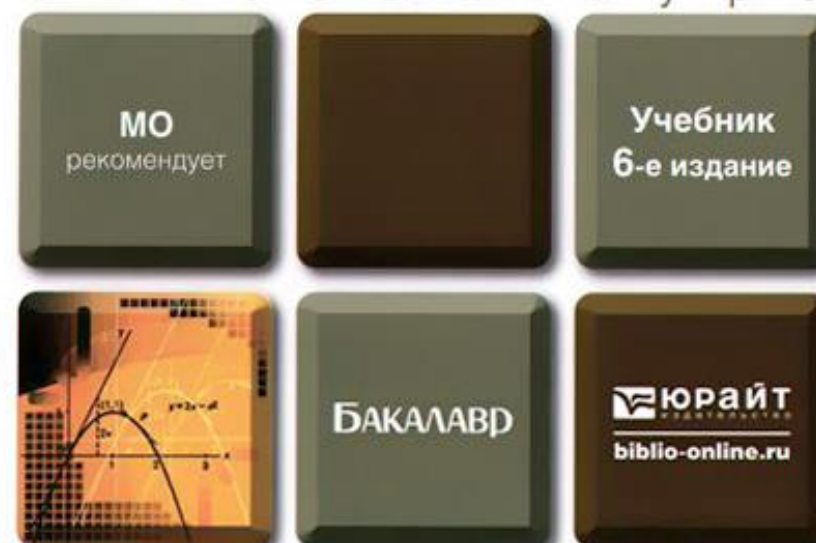
**Цветы от
ректора МФТИ
и бывшего
студента
Н.Н. Кудрявцева**



Курс математического анализа Том 1

Л. Д. Кудрявцев

б а з о в ы й к у р с



Курс математического анализа Том 2

Л. Д. Кудрявцев

б а з о в ы й к у р с



Курс математического анализа Том 3

Л. Д. Кудрявцев

б а з о в ы й к у р с



Л. Д. КУДРЯВЦЕВ

МАТЕМАТИЧЕСКИЙ АНАЛИЗ

ВЫСШЕЕ ОБРАЗОВАНИЕ
СОВРЕМЕННЫЙ УЧЕБНИК

Л. Д. Кудрявцев

КУРС
МАТЕМАТИЧЕСКОГО
АНАЛИЗА

1

ВЫСШЕЕ ОБРАЗОВАНИЕ
СОВРЕМЕННЫЙ УЧЕБНИК

Л. Д. Кудрявцев

КУРС
МАТЕМАТИЧЕСКОГО
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2

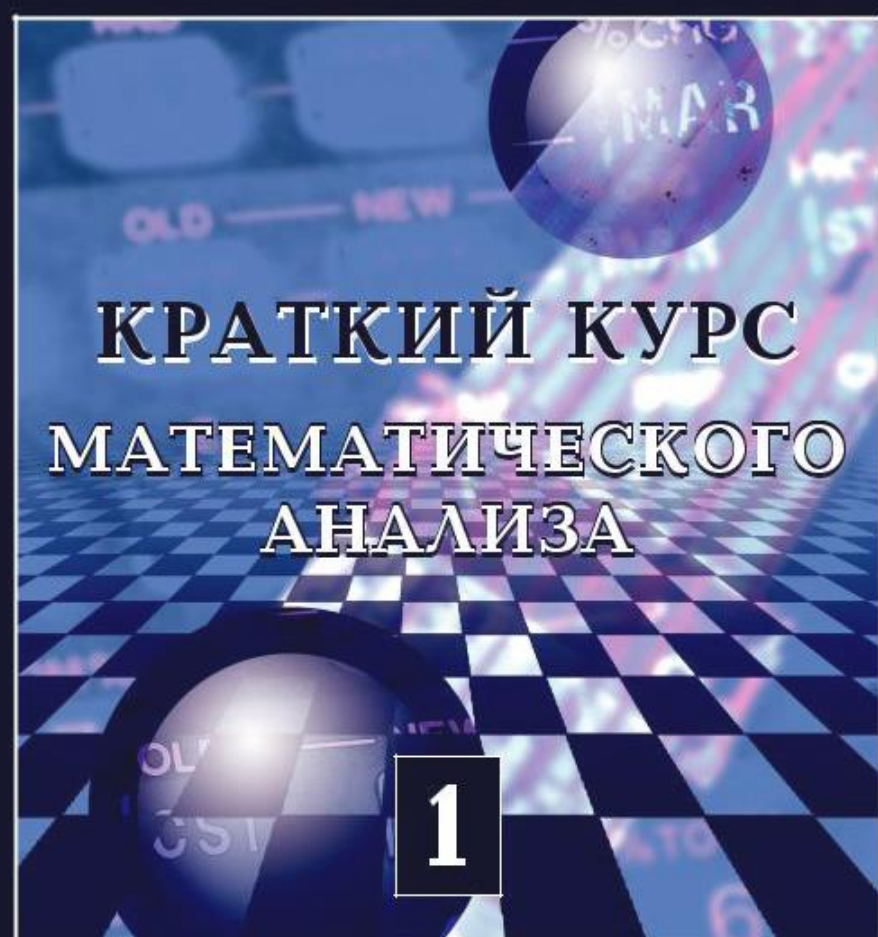
ВЫСШЕЕ ОБРАЗОВАНИЕ
СОВРЕМЕННЫЙ УЧЕБНИК

Л. Д. Кудрявцев

КУРС
МАТЕМАТИЧЕСКОГО
АНАЛИЗА

3

Л.Д. КУДРЯВЦЕВ



Л. Д. КУДРЯВЦЕВ
КУРС
математического
АНАЛИЗА

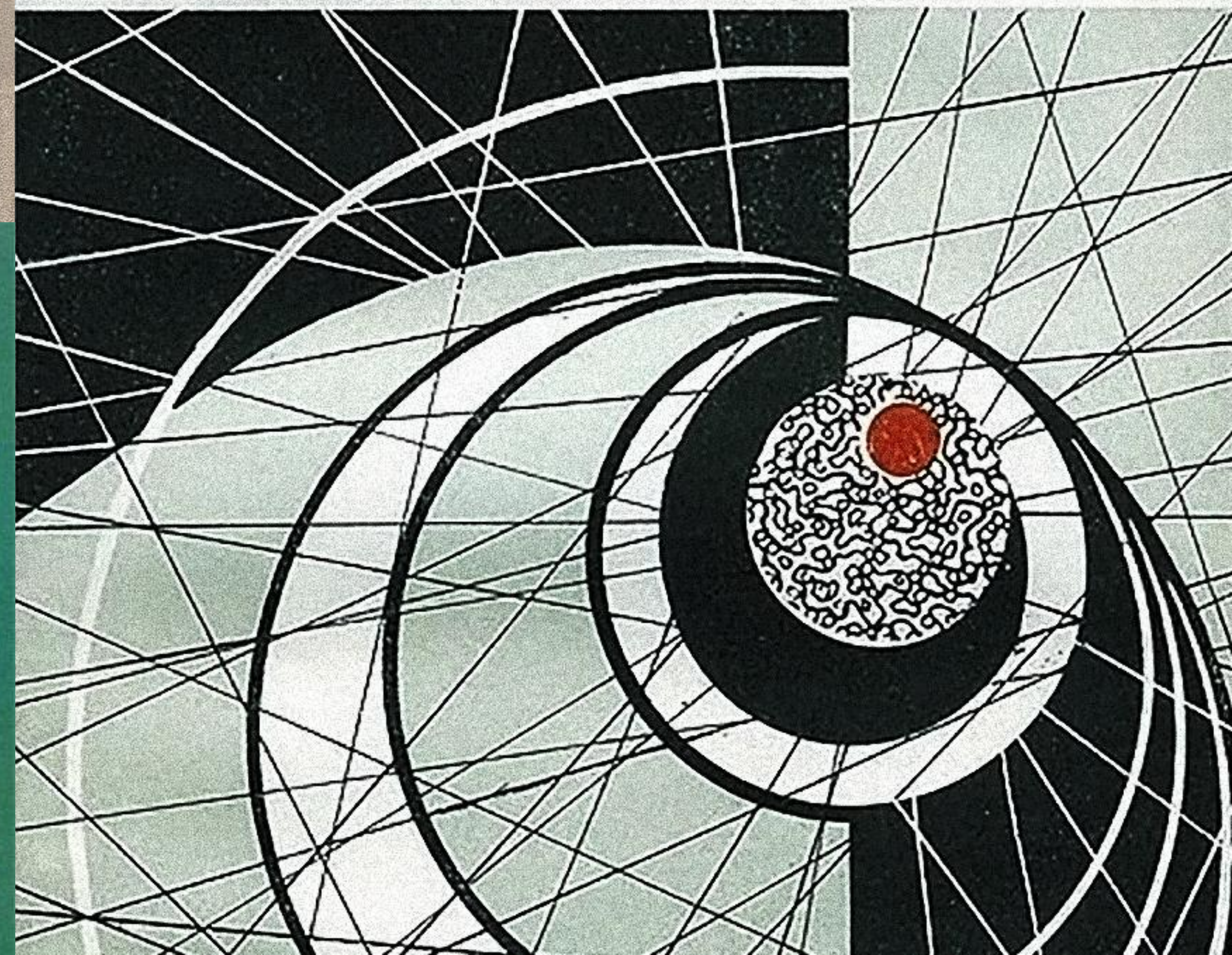


Л. Д. КУДРЯВЦЕВ, А. Д. КУТАСОВ,
В. И. ЧЕХЛОВ, М. И. ШАБУНИН
СБОРНИК
ЗАДАЧ
ПО
МАТЕМАТИЧЕСКОМУ
АНАЛИЗУ

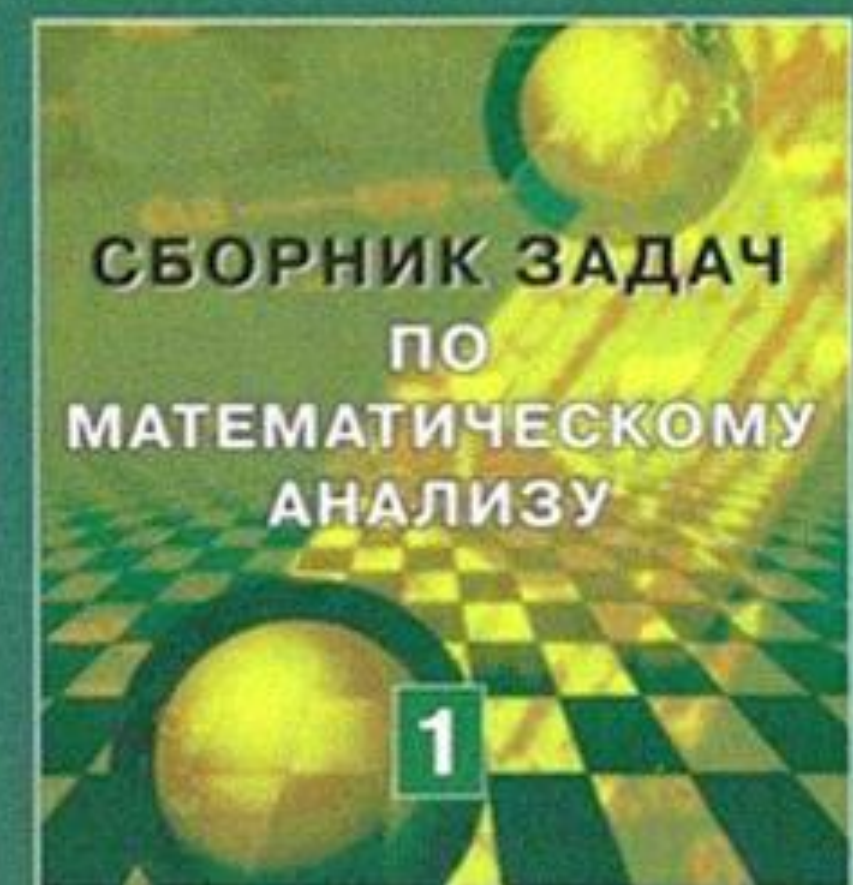
ФУНКЦИИ
НЕСКОЛЬКИХ ПЕРЕМЕННЫХ

Л. Д. КУДРЯВЦЕВ

МЫСЛИ О СОВРЕМЕННОЙ
математике
И ЕЕ ИЗУЧЕНИИ



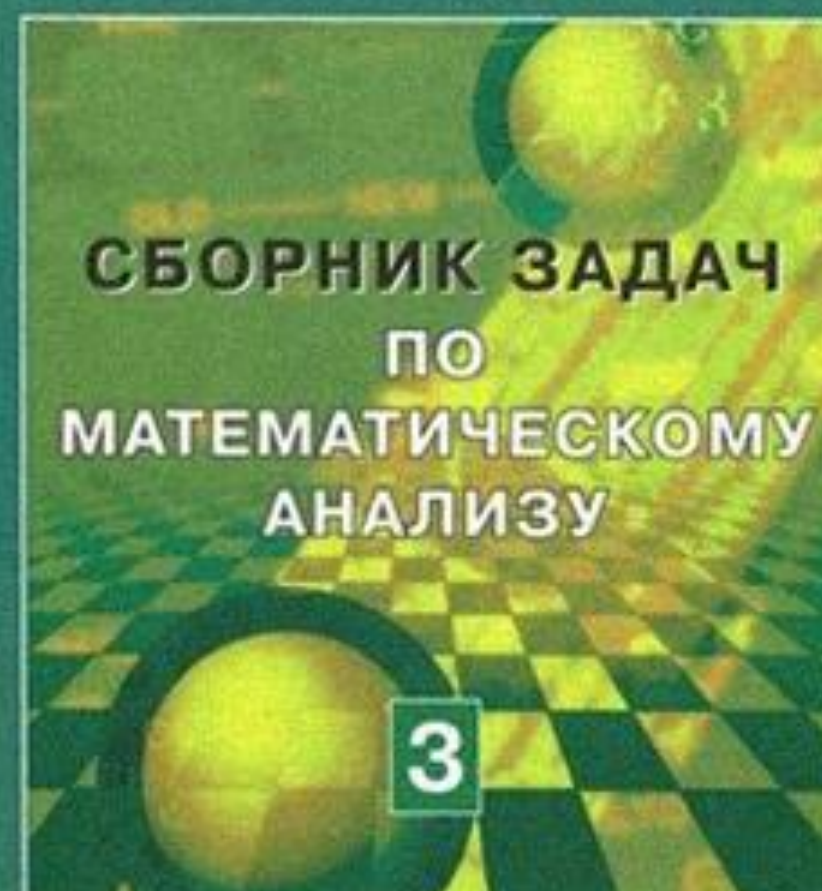
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В.И. ЧЕХЛОВ, М.И. ШАБУНИН



Л.Д. КУДРЯВЦЕВ, А.Д. КУТАСОВ,
В.И. ЧЕХЛОВ, М.И. ШАБУНИН

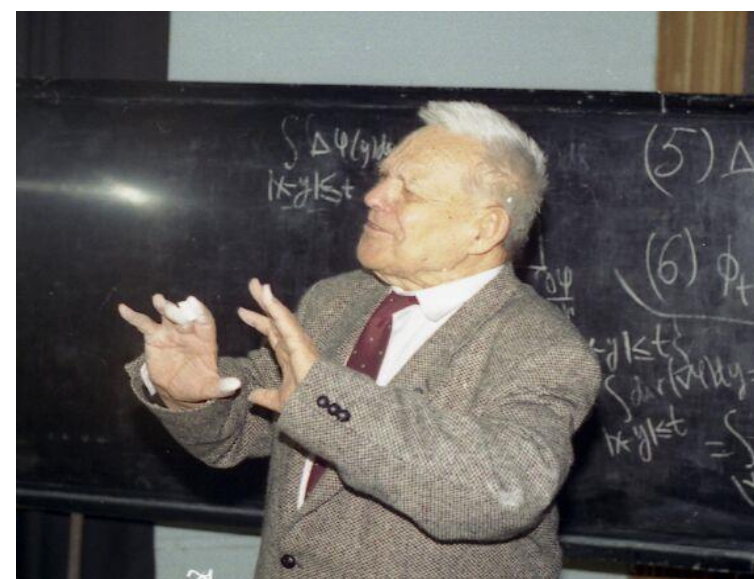


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В.И. ЧЕХЛОВ, М.И. ШАБУНИН





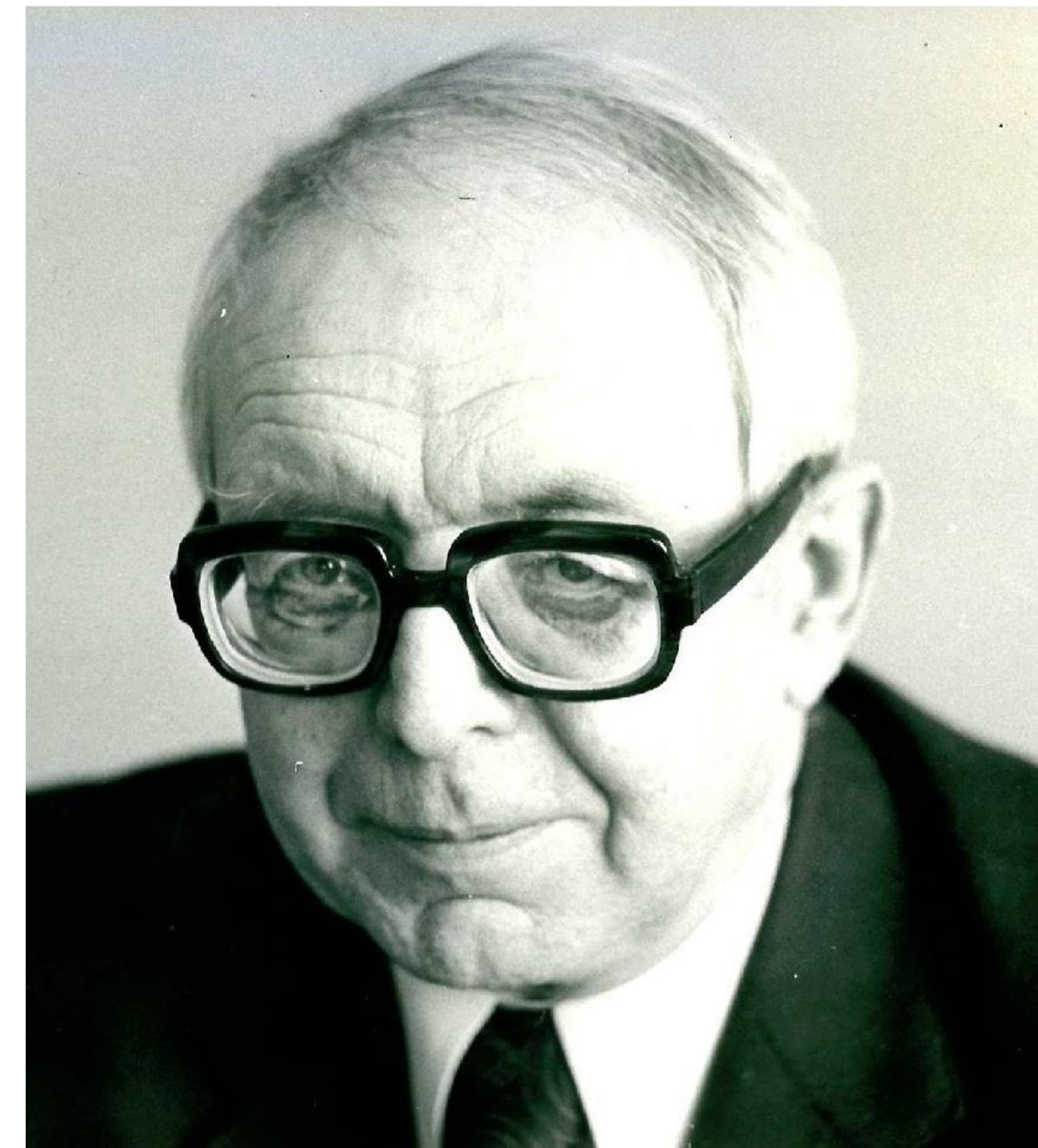
In 2003, a team of teachers from the Department of Higher Mathematics was awarded the Government of the Russian Federation Prize in the field of education for their work “In-depth mathematical training of students of engineering-physical and physical-technical specialties of universities”.



The laureates of this prize were academicians of the Russian Academy of Sciences V.S. Vladimirov., S.M. Nikolsky, corresponding member. RAS L.D. Kudryavtsev., Professor D.V. Beklemishev., E.S. Polovinkin, V.K. Romanko., M.I. Shabunin., G.N. Yakovlev.

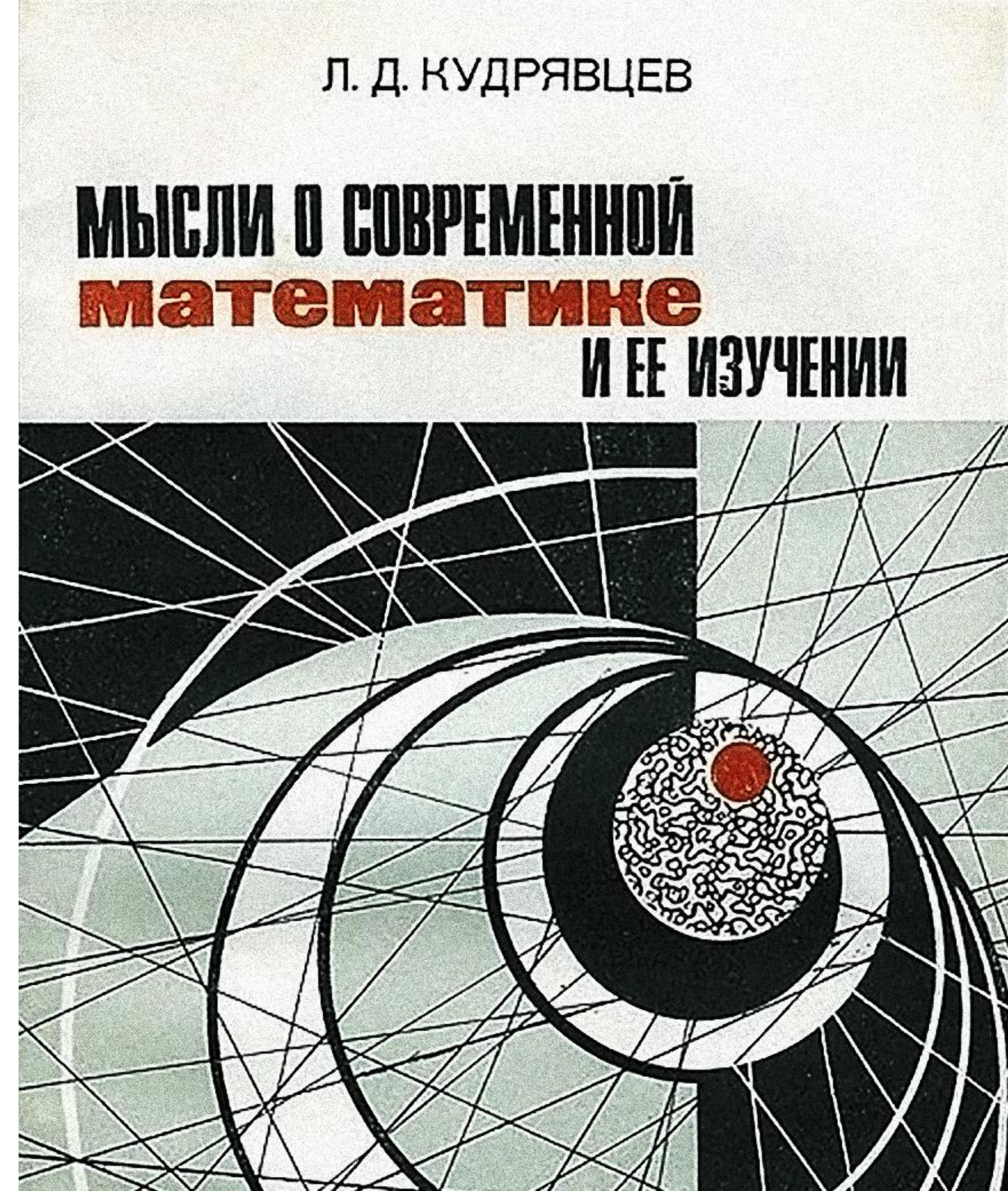
Main scientific results of L.D. Kudryavtsev

- The metric and topological properties of differentiable mappings are studied. A theory of embedding function spaces with weight is constructed.
- A variational method has been developed for solving boundary value problems for elliptic equations that degenerate at the boundary of the domain.
- A theory of almost normalized function spaces with given asymptotics is constructed. New problems with asymptotic initial data at singular points of ordinary differential equations are posed, Theorems of existence, uniqueness and stability of solutions are proven.
- Conditions have been found under which the solution space of a homogeneous system of equations is an attractor of the corresponding nonlinear system.

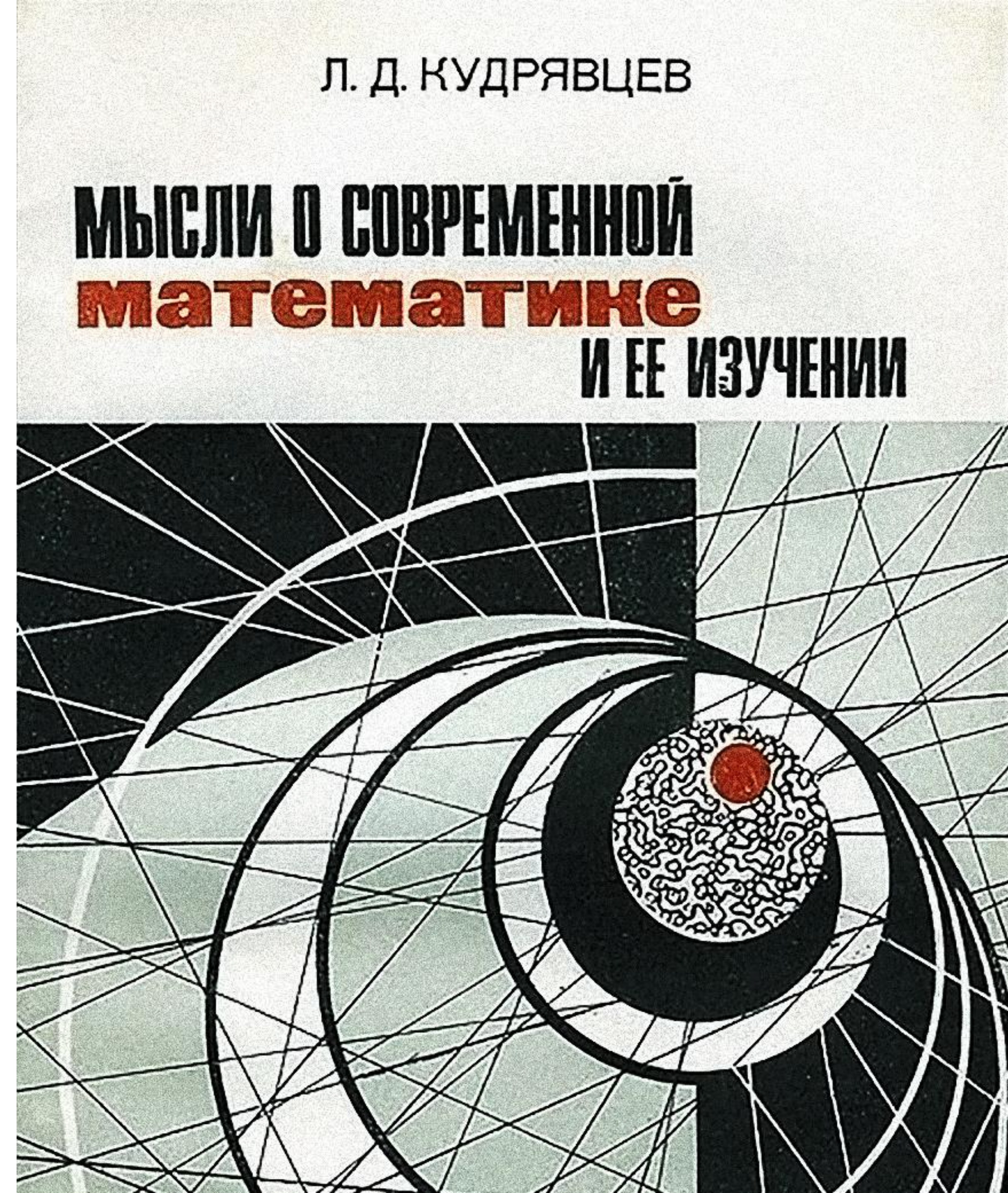


Lev Dmitrievich summed up the results of his thoughts and vast experience in 10 points:

1. In the mathematics course, mathematical structures are studied.
2. Mathematics is one.
3. The content of a general mathematics course cannot be determined from a purely pragmatic point of view, based only on the specifics of the student's future specialty, without taking into account the internal logic of mathematics itself.
4. The goal of teaching mathematics is for students to acquire a certain range of knowledge, the ability to use learned mathematical methods, develop mathematical intuition, and cultivate a mathematical culture.



5. The teaching of mathematics should be as simple, clear, natural and based on a level of reasonable rigor as possible.
6. You need to teach what is necessary and what is difficult to learn.
7. Existence theorems are useful not only for pure but also for applied mathematics.
8. In the first stages of learning, preference should be given to the inductive method, gradually preparing and using the deductive approach.



9. Learning to solve applied problems using mathematical methods is not the task of mathematical courses, and the task is in the specialty.

10. What branches of mathematics and to what extent should students be taught these specialties should be determined by specialists in this field in consultation with mathematicians, but how to teach this is a matter for professional mathematicians.





From the book by L.D. Kudryavtseva "Thoughts on modern mathematics and its teaching"

"Only that teacher will be able to succeed in raising a student whom students love and respect for his passion for his work and conscientious attitude to his work, for his kindness and humanity, integrity and objectivity, intolerance of injustice..."