



itmo



2023



Smart environment



Lifestyle



Talents

Well-being



Creative freedom



Science and technologies

Multilingual environment

itmo

RESEARCH AND EDUCATIONAL CORPORATION



Beyond IT:
photonics, quantum technologies,
life and health sciences




Development



Innovations



International opportunities



Quality education
that encourages proactive
career-building

A business-minded approach
to work processes and a distributed
management model

A major community of industrial
partners and a well-developed
startup culture

Shared culture – together, we love
science, play sports, and share our
passions with one another

Open source philosophy: we share
our best solutions, scale up ideas,
and expand the talent pool

Academic freedom, comfortable environment,
and administrative support for scientists,
with a focus on research on the scientific frontier



Our mission

To provide opportunities for the holistic development of individuals and to inspire them to tackle global challenges.

Our philosophy

IT's MOre than a UNIVERSITY



ITMO IN NUMBERS

ITMO

1,000+
PhD students

1,300+
faculty members

8,500+
Bachelor's
students

6,600+
Master's
students

15,000+
students

2,700+
international
students



ITMO IN RANKINGS

ITMO



79th

in the QS subject ranking
in Computer Science
& Information Systems

151-200
1st in Russia

in the QS subject ranking
in Electrical & Electronic
Engineering

155th

in the QS broad subject
ranking Engineering
& Technology



29th

in the U.S. News subject
ranking in Optics

163rd

in the U.S. News subject
ranking in Nanoscience
& Nanotechnology



76-100

in the ARWU subject
ranking in Automation
& Control



MosIUR

252nd

9th in Russia

in the Three
University
Missions ranking

TOP 400 2023



359th

in QS World
University
Rankings

Forbes

7th

in the Forbes
ranking of Russian
universities

FIELDS OF STUDY

SCHOOL OF TRANSLATIONAL INFORMATION TECHNOLOGIES

- Software development
- Artificial intelligence
- Machine learning
- Big Data
- Bioinformatics
- Translational medicine
- Urban studies
- Internet of Things

SCHOOL OF COMPUTER TECHNOLOGIES AND CONTROL

- Mechatronics and robotics
- Cyberphysical systems
- Digital navigation and control
- Computer graphics and design
- Unmanned aerial vehicles
- Bioengineering
- Infochemistry

SCHOOL OF PHYSICS AND ENGINEERING

- Laser technologies
- Radiophysics
- Optics
- Nanoelectronics
- Quantum technologies
- Metamaterials
- Photonics

SCHOOL OF LIFE SCIENCES

- Biotechnologies
- Solution chemistry of advanced materials and technologies
- Chemistry and molecular biology
- Infochemistry
- Green technologies

FACULTY OF TECHNOLOGICAL MANAGEMENT AND INNOVATIONS

- Digital transformation
- Innovative marketing
- Quality control and industry regulation
- Intellectual property
- Venture investments
- Technological entrepreneurship

INSTITUTE OF INTERNATIONAL DEVELOPMENT AND PARTNERSHIP

- Humanities and IT
- Art & Science
- Science communication
- Data, culture and visualization
- Public health sciences
- Product design

HIGHER SCHOOL OF ENGINEERING AND TECHNOLOGY

- Instrumentation
- Electrical engineering and technology
- Optical technologies
- Light-guided photonics

EDUCATIONAL MODEL

Bachelor's programs

Individual educational tracks

1 st year	Core disciplines: digital culture, soft skills, foreign languages, technological entrepreneurship, thinking, physical education, workplace safety, history		Professional competencies	
2 nd year				
3 rd year		Practical training, including research work (up to 12% of curriculum)		
4 th year				

Master's programs

Individual educational tracks

1st semester	Core disciplines: thinking, scientific entrepreneurship, creative technologies, foreign languages, applied AI, soft skills	Practical training, including research work (up to 45% of curriculum)	Professional competencies		
2nd semester					
3rd semester					
4th semester					

PhD programs 4 years

Academic disciplines + research

ITMO FOR STUDENTS

ITMO

**Opportunities
for self-development**

**Balance between
the virtual
and the physical**

Interdisciplinarity

Soft skills

Practical learning

**21st-century
fundamentals**

Professional skills

Social awareness



TALENT SEARCH SYSTEM

ITMO



Short-term schools



Exchange semesters



ITMO.START: a supplementary education platform for school students




ITMO Fellowship Program



Open contest for the establishment of international research labs

ITMO.STARS: a competition for uniquely talented students



ITMO Mega Contest and other national and international competitions

RESEARCH IN TOP-PRIORITY SUBJECT AREAS

ITMO

**LIFE AND HEALTH
SCIENCES**

**IT IN ECONOMICS, SOCIAL
SCIENCES, AND ART**

**INTELLIGENT TECHNOLOGIES,
ROBOTICS,
AND INFORMATION SECURITY**

**SMART MATERIALS,
NANOMATERIALS,
AND NANOTECHNOLOGIES**

**PHOTONICS, OPTICS,
AND QUANTUM COMMUNICATIONS**

NATURAL SCIENCES

INTERNATIONALIZATION OF SCIENCE

ITMO

Russian
and international
researchers
and students
of all degree levels



Renowned
world-class
scientists

13

INTERNATIONAL
RESEARCH
CENTERS

THE ITMO FELLOWSHIP PROGRAM

itmo

400+
applications
every year

50+
winners
every year

6 annual
application
review
rounds

21
current
participants



Daniel
Saponi



Andrey
Volotka



Tetiana
Orlova



Anton
Barchuk

?

Our next
hero

INTERNATIONAL OPPORTUNITIES: INCOMING AND OUTGOING ACADEMIC MOBILITY

itMo

Internships

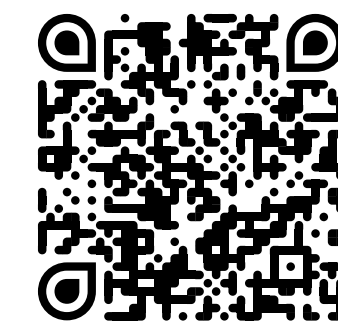
Conferences

Summer schools

Semester exchange

International
educational
programs

Buddy System



45+
partner
universities

8%

of all students
participate in outgoing
academic mobility
programs

22%

share of international
students in 2022

ITMO UNIVERSITY IN NATIONAL PROJECTS

ITMO

Advanced Engineering School

Provides training for unique specialists of a new kind (principal engineers) who possess the competencies needed to accelerate the transfer of new digital tech into the real economy.



Technology Transfer Center

Creates and introduces effective mechanisms for the commercialization of IP and support of nation-wide technology transfer initiatives.

Gazprom-ITMO industrial center

Implements full-cycle innovative projects that correspond to global trends and aim to achieve technological sovereignty in the oil-and-gas sector.



priority2030[^] leaders are made, not born

ITMO 2030 is an open-source university.

Startup studio

Transforms the university's student environment into a venue for the practical training of future entrepreneurs and development of new startups.



FUND FOR INFRASTRUCTURE
AND EDUCATIONAL
PROGRAMS
RUSNANO Group

ITMO UNIVERSITY IN NATIONAL PROJECTS

ITMO

Research Center “Strong AI in Industry”

Works on full-cycle development of a range of applied systems based on strong AI elements – all for the use in conceptual engineering and industrial facility management.



National Center for Quantum Internet

Develops and operates Quantum Communications Platform – a digital hardware-software platform solution seen in action as part of the Moscow – St. Petersburg “quantum highway”.



National Center for Cognitive Research

Main goal: to develop a domestic ecosystem for the creation and integration of machine learning and cognitive technologies in the establishment of high-tech products and services.



SIEMENS



INNOVATION

ITMO

ITMO University boasts one of Russia's top innovation infrastructures

100+
business
theses defended
by project teams

2,000+
applications submitted
to ITMO Accelerator

90+
million rubles
raised by the
project S-VIOME

20+
hackathons
with a total
prize pool
of 20.5
million rubles

320+
million rubles
in Startup Studio
funding

150+
million rubles
in investments
raised by Technopark
residents

50+
projects
in the field
of FoodTech

- 2021: the first startup studio in Russia is launched.
- 2021: Technology Transfer Center is established.
- April 2022: the startup Merkelbot is accepted by the major international accelerator Techstarts.
- May 2022: Energy HUB, a joint contest with Gazprom Neft and one of the country's largest events for university-based startups in the energy sector, is held.
- September 2022: the launch of a joint acceleration program with Uralchem Innovation.
- Thanks to support from the Ministry of Science and Higher Education, ITMO takes part in the federal project for support of academic technological entrepreneurship and wins the tenders for:
 - o establishment of acceleration programs;
 - o organization of professional skills-focused training courses;
 - o development of startup studios.

OUR ACHIEVEMENTS

ITMO



x7

2004

2008

2009

2012

2013

2015

2017

**We are the world's only
seven-time winners
of ICPC!**

Google Code Jam,
Facebook
Hacker Cup,
Yandex.Algorithm

ITMO scientists
are among the
laureates of
Presidential
awards and grants

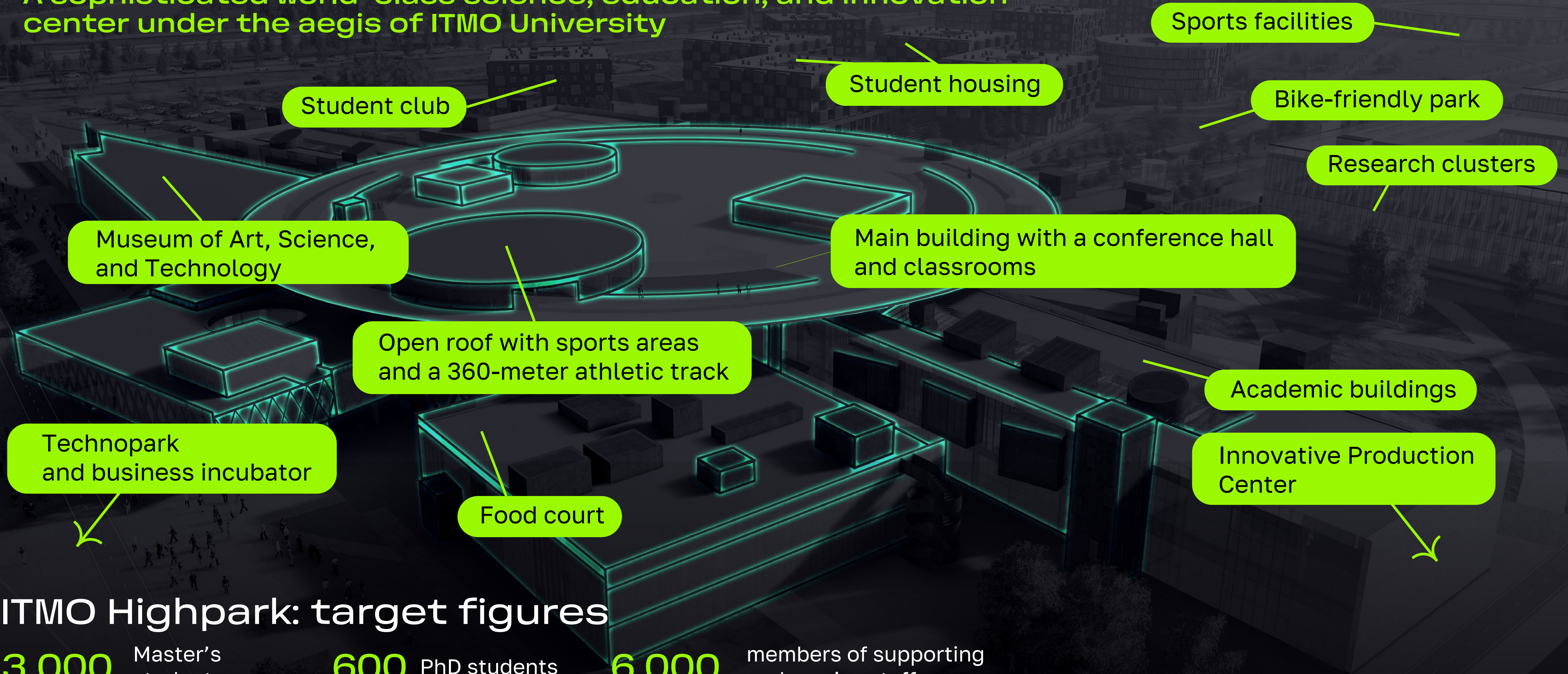
Scientists of the
Faculty of Physics are
laureates of awards
from the Russian
branch of Academia
Europaea

ITMO students
are winners of
VolgaCTF Final 2020
and MagNet 2021

ITMO HIGHPARK

ITMO

A sophisticated world-class science, education, and innovation center under the aegis of ITMO University



ITMO Highpark: target figures

3,000

Master's students

600

PhD students

6,000

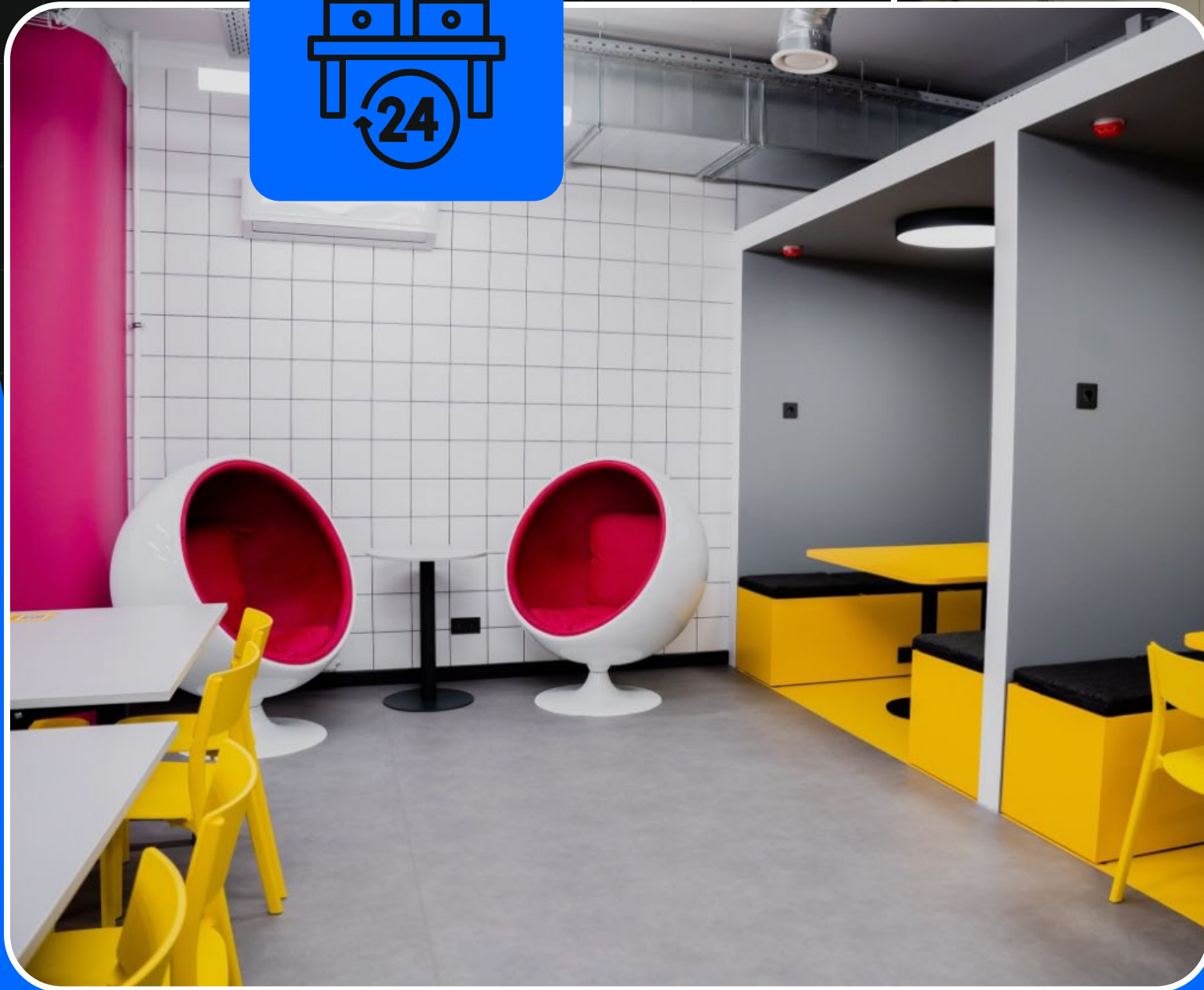
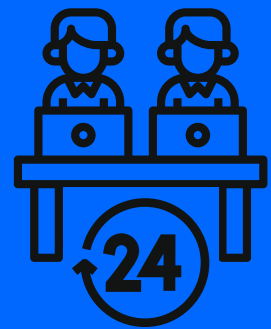
members of supporting and service staff

6,000

jobs for highly-qualified staff, including student employees

ITMO FAMILY: AN ENVIRONMENT FOR GROWTH

itmo



Coworking areas

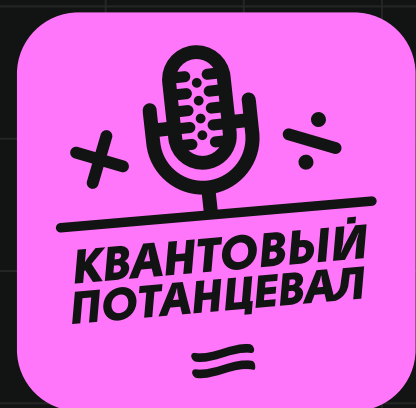
24/7



Digital library

ITMO FAMILY: AN ENVIRONMENT FOR GROWTH

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Quantum Potential
science stand-up show

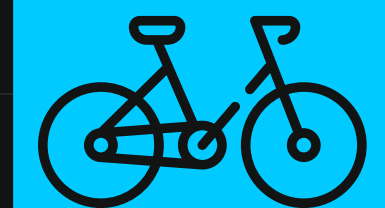


Graduation in the heart
of St. Petersburg



ITMO FAMILY: AN ENVIRONMENT FOR GROWTH

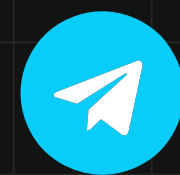
itmo



The bi-annual bike ride with the Rector

it's **MO**re than a
UNIVERSITY

Join us!



itmo_uni



spbifmo