

ONLINE

SUMMER RESEARCH CAMP

in Photonics **2021**

WHEN?

May 24 - June 4, 2021

ECTS?

Yes! 3 ECTS + ITMO Official Certificate

FEES?

20,000 RUB (~ 225€)

APPLICATION DEADLINE?

May 10, 2021

APPLICATION DOCUMENTS?

- Copy of your valid passport
- CV
- forward to Ms. Ekaterina Rassolenko at e.rassolenko@itmo.ru

REQUIREMENTS?

- Undergraduate (2nd year and above), graduate, PhD students, and working professionals in optics, photonics, Laser physics, and technology
- English B1 and higher

REQUIRED SOFTWARE?

- Microsoft Office
- Zoom



**Scan the QR code
to find out more!**

SUMMER RESEARCH CAMP ONLINE
in Photonics 2021
SCHEDULE
**May 24 -
June 4, 2021**

MAY 24, MONDAY	Kiselev F. "Introduction to the field of quantum technologies"	17:00 – 18:30	Lecture
	Goncharov R. "Introduction to quantum computing"	18:40 – 20:10	Practice
MAY 25, TUESDAY	Goncharov R., Medvedeva S. "Quantum key distribution: concepts and protocols"	17:00 – 18:30	Lecture
	Zinoviev A., Pervushin B. "Practical quantum key distribution and quantum random number generation"	18:40 – 20:10	Practice
MAY 26, WEDNESDAY	Fadeev M. "Practical quantum communications"	17:00 – 18:30	Lecture
	Gaidash A. "Introduction to dissipative dynamics of quantum states"	18:40 – 20:10	Lecture
MAY 27, THURSDAY	Nasedkin B. "Introduction to ghost imaging: quantum and classical"	17:00 – 18:30	Lecture
	Nasedkin B. "Experimental realizations of ghost imaging"	18:40 – 20:10	Practice
MAY 28, FRIDAY	N. Petrov. "Introduction to digital holography"	17:00 – 18:30	Lecture
	Rabosh E. "Digitization of an analog hologram on a CCD matrix"	18:40 – 20:10	Practice
MAY 31, MONDAY	N. Petrov. "Wavefront propagation"	17:00 – 18:30	Practice
	Rabosh E. "On- and off-axis hologram registration"	18:40 – 20:10	Practice
JUNE 1, TUESDAY	Zhukova M., Melnik M. "Introduction to femtosecond optics. Ultrafast dynamics in media and optical nonlinearities"	17:00 – 18:30	Lecture
	Ismailov A., Putilin S. "Nonlinear optics in the experimental lab: from supercontinuum generation to optical-induced breakdown"	18:40 – 20:10	Practice
JUNE 2, WEDNESDAY	Grachev Ya. "Introduction to THz Wave Photonics"	17:00 – 18:30	Lecture
	Zhukova M., Ponomareva E. "Pulsed THz sources and THz induced nonlinearities"	18:40 – 20:10	Lecture
JUNE 3, THURSDAY	Smolyanskaya O. "Application of femtosecond lasers in medicine and biology"	17:00 – 18:30	Lecture
	Belashov A. "Digital holographic microscopy, tomography and their application in biological studies"	18:40 – 20:10	Lecture
JUNE 4, FRIDAY	Smolyanskaya O. "Application of terahertz optics for biomedical use, food and art-works testing and bio-like materials"	17:00 – 18:30	Lecture
	Smolyanskaya O. "Imaging of art-painting in Python"	18:40 – 20:10	Practice

ALL classes are scheduled according to Moscow time (GMT +3).
Schedule can be adjusted according to the participant's time zone.