



# Ivan Gordeev

## Curriculum Vitae

### Personal Website

gordeev.page



### Social Networks

researchgate.net



github.com



### Languages

Russian ★★★★★

English ★★★★★

## General Information

**Full Name:** Ivan Sergeevich Gordeev

**Sex:** Male

**Date of Birth:** 21<sup>st</sup> July 1996

**Place of Birth:** Russia

**Nationality:** Russian

**Marital Status:** Married

## Work Experience

- 2023 – ... **Researcher** [Joint Institute for Nuclear Research](#)  
Researcher at the Laboratory of Radiation Biology. Radiation Research Department of the base facilities. Joint Institute for Nuclear Research (Dubna, Russia)
- 2020 – 2023 **Junior Researcher** [Joint Institute for Nuclear Research](#)  
Junior Researcher at the Laboratory of Radiation Biology. Section of Radiation Research. Research group for studying radiation fields of JINR basic facilities and environment. Joint Institute for Nuclear Research (Dubna, Russia)
- 2017 – 2020 **Laboratory Assistant** [Joint Institute for Nuclear Research](#)  
Laboratory Assistant at the Laboratory of Radiation Biology. Section of Radiation Research. Research group for studying radiation fields of JINR basic facilities and environment. Joint Institute for Nuclear Research (Dubna, Russia)

## Education

- 2020 – 2024 **PhD Student** [Dubna State University](#)  
Dubna State University. Department of Fundamental problems of microworld physics. Engineering and Physics Institute (Dubna, Russia)  
**Major:** Physics and astronomy
- 2018 – 2020 **MSc (with honours) in Physics** [Dubna State University](#)  
Dubna State University. Department of Biophysics. Faculty of Natural and Engineering Sciences (Dubna, Russia)  
**Specialization:** Radiation Biophysics and Astrobiology  
**Thesis title:** “Monte Carlo Simulation of Radiation Fields Inside the Spacecraft and Calculation of Astronaut Doses on the Earth-Mars Flight”  
**GPA:** 5.00 / 5.00
- 2014 – 2018 **BSc (with honours) in Physics** [Dubna State University](#)  
Dubna State University. Department of Biophysics. Faculty of Natural and Engineering Sciences (Dubna, Russia)  
**Specialization:** Human and Environmental Radiation Safety  
**Thesis title:** “Simulation of Radiation Fields Inside Spacecraft in the Earth’s Environment”  
**GPA:** 4.95 / 5.00

## Activities & Awards

- 24-28.10.22 **Scientific conference** [Joint Institute for Nuclear Research](#)  
Participation in the XXVI International Scientific Conference of Young Scientists and Specialists (Dubna, Russia). Topic of report: "A new type of ground-based simulator of inner radiation field of a spacecraft in deep space"  
**Results:** Certificate of Attendance
- 21.9.21 **Online videoconference** [GSI Helmholtz Center for Heavy Ion Research](#)  
Participation in the ESA–FAIR Space Radiation Summer School special videoconference (Darmstadt, Germany)  
**Results:** Certificate of Attendance
- 19-22.7.21 **Online tutorial** [Japan Atomic Energy Agency \(JAEA\)](#)  
Participation in the advanced course on PHITS (Tokai, Japan)  
**Results:** Certificate of Attendance
- 1-5.2.21 **Online tutorial** [Japan Atomic Energy Agency \(JAEA\)](#)  
Participation in the basic course on PHITS (Tokai, Japan)  
**Results:** Certificate of Attendance
- 5-16.10.20 **Online training** [The European Organization for Nuclear Research \(CERN\)](#)  
Attended the FLUKA Beginners' Online Training. Switzerland, Meyrin.  
**Results:** Certificate of Attendance
- 17.4.20 **Scientific-practical conference** [Dubna State University](#)  
Participation in the XXVII annual regional scientific-practical conference for students, postgraduates and young specialists at Dubna State University with the topic of report: "Calculation of radiation fields during the operation of the Booster and Nuclotron of the NICA complex". Russia, Dubna  
**Results:** Best Student Presentation Award of the "Radiation Biophysics and Astrobiology" subsection
- 15-16.4.19 **Scientific-practical conference** [Dubna State University](#)  
Participation in the XXVI annual regional scientific-practical conference of students, postgraduates and young specialists at Dubna State University with the topic of report: "Calculation of the radiation fields from the GCR inside the spacecraft during interplanetary flights". Russia, Dubna  
**Results:** Best Student Presentation Award
- 3.12.18 **Scientific-popular student conference** [Dubna State University](#)  
Participation in the scientific-popular student conference in English: "Universe of Science. Challenges and Solutions" at Dubna State University with the topic of report: "Breaking the Wall of Cosmic Radiation using Particle Accelerator"  
**Results:** Best Student Presentation Award and nomination for "The Best Communicative Skills and Best Presentation"
- 22.10.18 **Competition** [Dubna State University](#)  
Participant of the "Best students of the Dubna State University" competition  
**Results:** Best Student of the Dubna State University Award
- 17-19.10.18 **International Conference** [International Conference Hall in Dubna](#)  
Participant of the meeting of the International Conference "Modern Problems of Space Radiobiology and Astrobiology"  
**Results:** Co-author of the conference report: "Modeling Radiation Fields Inside Spacecraft at JINR's Nuclotron"

- 23.7-13.9.18 **Summer Student Program** [GSI Helmholtz Center for Heavy Ion Research](#)  
 Participation in the HGS-HIRe Summer Student Program 2018 at GSI. Germany, Darmstadt  
**Results:** Skills received: in using MC transport code FLUKA, in work with ROOT framework. The skills of scientific writing and presentation, as well as teamwork skills and communication in a foreign language were improved. Attended a number of lectures on various fields of physics. Got acquainted with the main facilities of the GSI (UNILAC, ESR, HADES, HILITE) and the FAIR project. A report on the work in the research group was written: "Comparison of MCNPX, GEANT4 and FLUKA Simulations of the Radiation Situation Inside a Spacecraft in Deep Space", and a presentation was made on the closing section. The report is published in the proceedings of the 2018 HGS-HIRe Summer Student Program
- 17.4.18 **Scientific-practical conference** [Dubna State University](#)  
 Participation in the XXV annual regional scientific-practical conference of students, postgraduates and young specialists at Dubna State University with the topic of report: "Simulation of Radiation Fields Inside Spacecraft in the Earth's Environment". Russia, Dubna  
**Results:** Publication in the conference proceedings, certificate of participation
- 26.1-5.2.18 **Personnel exchange program (Winter School)** [Kindai University](#)  
 Participation in the personnel exchange program "Monodukuri Engineer in Japan and Russia" winter student school at Kindai University. Japan, Osaka  
**Results:** Communication skills in a foreign language were improved. Got acquainted with Japanese culture, manufactory and Monodukuri technique
- 2.10.17 **Pitch competition** [Visit Centre of Joint Institute for Nuclear Research \(JINR\)](#)  
 Participation in the "Falling Walls Lab Dubna", international Lab season stage at Joint Institute for Nuclear Research. Russia, Dubna  
**Results:** Certificate of participation
- 16.12.16 **Scientific-popular student conference** [Dubna State University](#)  
 Participation in the scientific-popular student conference in English "Discovering the Mysteries of Science" at Dubna State University with the topic of report: "Feynman Diagrams". Russia, Dubna  
**Results:** Second Best Presentation Award and nomination for the "Best Pronunciation"

# Publications

1. I. S. Gordeev & A. N. Bugay  
**Computer Physics Communications**, vol. 305 (2024)  
*"Computer modeling of a new type galactic cosmic rays simulator"*  
DOI: 10.1016/j.cpc.2024.109346
2. I. S. Gordeev & G. N. Timoshenko  
**Physics of Particles and Nuclei Letters**, vol. 19, pp. 402–407 (2022)  
*"Albedo of Neutrons of Relativistic Energies"*  
DOI: 10.1134/S1547477122040136
3. A. V. Butenko, I. S. Gordeev, A. D. Kovalenko, M. Paraipan, E. M. Syresin, and G. N. Timoshenko  
**Physics of Particles and Nuclei Letters**, vol. 19, pp. 123–128 (2022)  
*"Prediction of Radiation Environment around NICA Complex"*  
DOI: 10.1134/S1547477122020042
4. G. N. Timoshenko & I. S. Gordeev  
**Physics of Particles and Nuclei Letters**, vol. 18, pp. 799–805 (2021)  
*"Reference Radiation Field for GCR Chronic Exposure Simulation"*  
DOI: 10.1134/S1547477121070128
5. I. S. Gordeev & G. N. Timoshenko  
**Life Sciences in Space Research**, vol. 30, pp. 66–71 (2021)  
*"A new type of ground-based simulator of radiation field inside a spacecraft in deep space"*  
DOI: 10.1016/j.lssr.2021.05.002
6. G. N. Timoshenko & I. S. Gordeev  
**Planetary and Space Science**, vol. 199 (2021)  
*"Computation of linear energy transfer of space radiation in biological tissue analog"*  
DOI: 10.1016/j.pss.2021.105190
7. G. N. Timoshenko & I. S. Gordeev  
**Physics of Particles and Nuclei Letters**, vol. 17, n. 7, pp. 951–957 (2020)  
*"Calculating the Linear Energy Transfer Distribution in Radiobiological Experiments on the U400M Cyclotron"*  
DOI: 10.1134/S1547477120070055
8. G. N. Timoshenko & I. S. Gordeev  
**Physics of Particles and Nuclei**, vol. 51, n. 5, pp. 988–993 (2020)  
*"Estimation of the Astronaut's Doses inside the Spacecraft Habitable Module in Deep Space"*  
DOI: 10.1134/S106377962005007X
9. G. N. Timoshenko & I. S. Gordeev  
**Physics of Particles and Nuclei Letters**, vol. 17, n. 3, pp. 379–388 (2020)  
*"Forecasting Radiation Environment around the NICA Booster"*  
DOI: 10.1134/S1547477120030152
10. G. N. Timoshenko & I. S. Gordeev  
**Journal of Astrophysics and Astronomy**, vol. 41 (2020)  
*"Simulation of radiation field inside interplanetary spacecraft"*  
DOI: 10.1007/s12036-020-9620-3
11. G. N. Timoshenko, A. R. Krylov, M. Paraipan, I. S. Gordeev  
**Radiation Measurements**, vol. 107, pp. 27–32 (2017)  
*"Particle Accelerator-Based Simulation of the Radiation Environment on Board Spacecraft for Manned Interplanetary Missions"*  
DOI: 10.1016/j.radmeas.2017.10.006

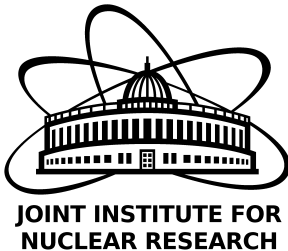
## OS Knowledge

Linux ★★★★★  
Windows ★★★★★

## Programming Skills

Python ★★★★★  
Bash ★★★★★  
Fortran ★★★★★  
C++ ★★★★★

## Alma Mater



## Preprints

1. I. S. Gordeev, A. N. Bugay  
**Preprint of the Joint Institute for Nuclear Research [E11-2024-17] (2024)**  
*"Computer modeling of a new type galactic cosmic rays simulator"*
2. Ivan Gordeev  
**ArXiv e-prints [cs.HC, hep-ex] (2020)**  
*"FitsGeo – Python package for PHITS geometry development and visualization"*  
*arXiv:2008.03298*

## Software in Use

Ubuntu OS: FLUKA+Flair, PHITS, GEANT4, ROOT, GnuPlot, Jupyter Notebook,  $\LaTeX$ , GIMP, Inkscape, PyCharm, Visual Studio Code, Git

Windows OS: Origin, Microsoft Office applications, Mathcad, Autodesk Inventor, AutoCAD, Photoshop

## Hobbies

Computer modeling, Arduino-based modeling, DIY

## About me

One of my favorite physicists is Richard Feynman and I really like one of his famous quotes: "What I Cannot Create, I Do Not Understand". I perceive this expression as my credo. And I interpret it in the way that if you can't "create" something, no matter how: in your mind, or in real life — performing an experiment, then you can't understand it properly.

To understand something better you always need to invent new approaches and develop new models describing actual problem. After a long and persistent reflection and attempts to solve the problem a solution comes.

**Let's create in order to understand!**