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### Education

- Sep.2016 – present **PhD program**,  
University of Colorado Boulder (CU Boulder),  
Department of Mechanical Engineering.
- Sep.2012 – Jul.2014 **Master of Science**, *Applied Mathematics and Physics*,  
Moscow Institute of Physics and Technology (MIPT, Phystech),  
Department of Control and Applied Mathematics.  
Graduated with honors
- Sep.2008 – Jun.2012 **Bachelor of Science**, *Applied Mathematics and Physics*,  
Moscow Institute of Physics and Technology (MIPT, Phystech),  
Department of Control and Applied Mathematics.

### Awards and Honors/Fellowships

- Sep.2013 – Dec.2013 Special Academic Fellowship (MIPT)  
Jan.2013 – Jun.2013 Special Academic Fellowship (MIPT)  
Sep.2008 – May.2009 Governor of the Moscow Region Fellowship

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### Research Experience

- Jan.2017 – present **Research assistant**, UNIVERSITY OF COLORADO BOULDER,  
Turbulence and Energy Systems Laboratory (TESLa),  
Website: <http://tesla.colorado.edu/>.
- Sep.2014 – Jul.2016 **Reseacher**, KELDYSH INSTITUTE OF APPLIED MATHEMATICS,  
Computational Aeroacoustics Laboratory,  
Website: <http://caa.imamod.ru>.
- Sep.2012 – Jul.2015 **Research student practice**, KELDYSH INSTITUTE OF APPLIED MATHEMATICS,  
Computational Aeroacoustics Laboratory,  
Website: <http://caa.imamod.ru>.

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### Teaching Experience

- Sep.2016 – Dec.2016 **Teaching Assistant**, UNIVERSITY OF COLORADO BOULDER,  
Department of Mechanical Engineering.  
Leading Matlab labs for an undergraduate Numerical Methods course.  
Leading Abaqus labs for an undergraduate/graduate Finite Element Analysis course.
- Feb.2015 – May.2016 **Teaching Assistant**, MOSCOW INSTITUTE OF PHYSICS AND TECHNOLOGY,  
Department of Numerical Mathematics and Informatics.  
Teaching Numerical Mathematics course.
- Sep.2012 – May.2016 **Private Tutor**.  
Private tutoring in Maths and Physics
- Sep.2011 – Aug.2013 **Grader**, CORRESPONDENCE SCHOOL OF PHYSICS AND MATHEMATICS.  
Graded tasks, demonstrated solutions to certain homework problems in Maths and Physics.

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## Scientific Presentations at Conferences and Seminars

- Nov.23 – Nov.28, 2015 **Numerical investigation of the Rankin vortex instability and the dynamics of its radiation**,  
*58th annual MIPT scientific conference*, Dolgoprudny, Russia.
- Sep.28 – Oct.02, 2015 **Numerical simulation of acoustic radiation by Rankin vortex**,  
*Forth Open Russian National conference on aeroacoustics*, Zvenigorod, Russia.
- Nov.19 – Nov.25, 2012 **Mathematical modeling of acoustic waves scattering on isolated vortex**,  
*55th annual MIPT scientific conference*, Dolgoprudny, Russia.
- Sep.19 – Sep.22, 2012 **Computational simulation of acoustic waves interaction with isolated vortex structure in a linear approximation**,  
*Workshop “Computational Experiment in Aeroacoustics”*, Svetlogorsk, Russia.

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## Publications

- Article **O. Doronina, P. Bahvalov, T. Kozubskaya, Numerical study of acoustic radiation dynamics of a Rankine vortex**, *Acoustical Physics*, 2016, 62(4), pp.467–477.
- Article (in Russian) **O. Doronina, N. Zhdanova, Computational simulation of acoustic waves interaction with isolated vortex structure**, *RAS Journal of Mathematical Modeling*, 2013, 25(9) pp.85-94.
- Abstract (in Russian) **I. Abalakin, P. Bahvalov, O. Doronina, N. Zhdanova and T. Kozubskaya, Modeling of aerodynamics of moving bodies using mesh adaptation to immersed boundaries on unstructured triangular meshes**, in *Proceedings of Workshop “Computational Experiment in Aeroacoustics”*, Sep.19 – 24, 2016, Svetlogorsk, Russia.
- Abstract (in Russian) **O. Doronina, P. Bahvalov, T. Kozubskaya, Numerical investigation of the Rankin vortex instability and the dynamics of its radiation**, in *Proceedings of abstracts 58th annual MIPT scientific conference*, Nov.23 – 28, 2015, Dolgoprudny, Russia.
- Abstract (in Russian) **O. Doronina, P. Bahvalov, T. Kozubskaya, Numerical simulation of acoustic radiation by Rankin vortex**, in *Proceedings of Forth open Russian National conference on aeroacoustics*, Sep.28 – Oct.2, 2015, Zvenigorod, Russia.
- Abstract (in Russian) **O. Doronina, Mathematical modeling of acoustic waves scattering on isolated vortex**, in *Proceedings of abstracts 55th annual MIPT scientific conference*, Nov.19 – 25, 2012, Dolgoprudny, Russia.
- Abstract (in Russian) **O. Doronina, Computational simulation of acoustic waves interaction with isolated vortex structure in a linear approximation**, in *Proceedings of Workshop “Computational Experiment in Aeroacoustics”*, Sep.19 – 22, 2012, Svetlogorsk, Russia.

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## Interests

- Swimming Former member of the MIPT Swimming Team
- Chess I like the style of Jose Raul Capablanca
- Hitch-Hiking Chicago – San Francisco, Moscow – Baykal Lake, Warsaw – Vienna
- Unicycle Yes, I can ride it!

## Summer Volunteer Workcamps

- Aug.2012 – Sep.2012 **Ecological project in Germany**, *Developed leadership qualities*.
- Jul.2011 – Jul.2011 **Community service project in Luxembourg**,  
*Improved communicative qualities in international team*.