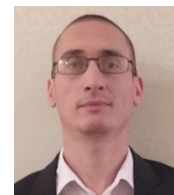


# CURRICULUM VITAE



## Andrey Dnestryan

PERSONAL DATA	
Name	Andrey Igorevich Dnestryan
Author name (for publications)	Andrey I. Dnestryan, Dnestryan A. I.
Age	29
Citizenship	Russian Federation
Address	Moscow Institute of Physics and Technology, Institutskiy per. 9, Dolgoprudny, Moscow Region 141701, Russian Federation
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ORCID	<a href="https://orcid.org/0000-0002-9381-2133">orcid.org/0000-0002-9381-2133</a>
Web-site:	<a href="https://mipt.ru/education/chair/mathematics/tutors/others/dnestryan.php">https://mipt.ru/education/chair/mathematics/tutors/others/dnestryan.php</a>

EDUCATION			
Years	University	Subdivision	Qualification
2006 - 2010	Moscow Institute of Physics and Technology	Department of Physical and Quantum Electronics	<b>B. Sci. Applied Mathematics and Physics</b>
2010 - 2012	Moscow Institute of Physics and Technology	Department of Physical and Quantum Electronics	<b>M. Sci. Applied Mathematics and Physics</b>
2012 - 2016	Moscow Institute of Physics and Technology	Postgraduate School in Department of High Mathematics	<b>PhD in Theoretical Physics (Cand. Phys.-Math. Sci.)</b>

(PhD Thesis -- Quantum Tomography and Fractional Fourier Transform;

[https://mipt.ru/education/post-graduate/D212-156-06/1-adnestryan/Thesis\\_Dnestryan.pdf](https://mipt.ru/education/post-graduate/D212-156-06/1-adnestryan/Thesis_Dnestryan.pdf))

<b>POSITIONS</b>	
2011 - 2017	<b>Assistant</b> , Department of High Mathematics, Moscow Institute of Physics and Technology
2014 - present	<b>Fellow Researcher</b> , Department of Theoretical Physics, Moscow Institute of Physics and Technology
2016 - 2017	<b>Fellow Researcher</b> , Laboratory of Quantum Information Theory, Moscow Institute of Physics and Technology
2017 - present	<b>Senior Lecturer</b> , Department of High Mathematics, Moscow Institute of Physics and Technology
2018 - present	<b>Associate Professor</b> , Faculty of Computer Science, Higher School of Economics

<b>PUBLICATIONS</b>	
G. G. Amosov, A. I. Dnestryan, "On the spectrum of a set of integral operators determining the symplectic quantum tomogram", Proceedings of MIPT, (2011)- <b>3</b> № 1(9). – p.1 – 5. <a href="https://mipt.ru/upload/b6f/Pages_from_5-9-arphcx1tgs.pdf">https://mipt.ru/upload/b6f/Pages_from_5-9-arphcx1tgs.pdf</a>	
G. G. Amosov, A. I. Dnestryan, "Reconstruction of a pure state from incomplete information on its optical tomogram", <i>Russian Math. (Iz. VUZ)</i> , <b>57</b> :3 (2013), 51–55 <a href="https://link.springer.com/article/10.3103%2FS1066369X13030079">https://link.springer.com/article/10.3103%2FS1066369X13030079</a>	
G. G. Amosov, A. I. Dnestryan, "On the entropy gain under the action of the amplitude damping channel on qutrit", <i>J. Russian Laser Research</i> , <b>35</b> :3 (2014), 291–294. <a href="https://link.springer.com/article/10.1007%2Fs10946-014-9425-4">https://link.springer.com/article/10.1007%2Fs10946-014-9425-4</a>	
G. G. Amosov, A. I. Dnestryan, "Towards a tomographic representation of quantum mechanics on the plane", <i>PhysicaScripta</i> , <b>90</b> :7 (2015). <a href="https://doi.org/10.1088/0031-8949/90/7/074025">https://doi.org/10.1088/0031-8949/90/7/074025</a>	
A. I. Dnestryan, "On determination of pure quantum states by homodyne detection", <i>Journal of Samara State Technical University</i> , <b>20</b> :1 (2016), 33–42. <a href="http://www.mathnet.ru/links/b9ddb7685f56c0cca973cc44ab325175/vsgtu1462.pdf">http://www.mathnet.ru/links/b9ddb7685f56c0cca973cc44ab325175/vsgtu1462.pdf</a>	
Andrey I. Dnestryan and Oleg I. Tolstikhin, "Integral-equation approach to the weak-field asymptotic theory of tunneling ionization", <i>Phys. Rev. A</i> <b>93</b> , 033412 (2016) <a href="http://journals.aps.org/pr/abstract/10.1103/PhysRevA.93.033412">http://journals.aps.org/pr/abstract/10.1103/PhysRevA.93.033412</a>	
Lars B. Madsen, Frank Jensen, Andrey I. Dnestryan, Oleg I. Tolstikhin, "Structure factors for tunneling ionization rates of molecules: General Hartree-Fock-based integral representation", <i>Phys. Rev. A</i> <b>96</b> , 013423 (2017) <a href="https://journals.aps.org/pr/abstract/10.1103/PhysRevA.96.013423">https://journals.aps.org/pr/abstract/10.1103/PhysRevA.96.013423</a>	
Andrey I. Dnestryan, Oleg I. Tolstikhin, Lars B. Madsen, Frank Jensen, "Structure factors for tunneling ionization rates of molecules: General grid-based methodology and convergence studies", <i>J. Chem. Phys.</i> <b>149</b> , 164107 (2018) <a href="https://ajp.scitation.org/doi/10.1063/1.5046902">https://ajp.scitation.org/doi/10.1063/1.5046902</a>	

<b>LIST OF READ COURSES</b>
Calculus I (in English)
Introduction to Mathematical Analysis
Multivariate calculus, Integrals and Series
Multiple Integrals and Field Theory
Harmonic Analysis
Analytic Geometry
Linear Algebra
Differential Equations
Complex Analysis
Introduction to Special Operating Systems

<b>CONFERENCES &amp; REPORTS</b>
53 <sup>rd</sup> International Conference MIPT, Nov 23 – 28, 2010, MIPT, Moscow, <a href="https://mipt.ru/upload/a18/07-FUPM1-view-arpqgyjmcb.pdf">https://mipt.ru/upload/a18/07-FUPM1-view-arpqgyjmcb.pdf</a>
2 <sup>nd</sup> Summer School “Applied Mathematics and Physics”, Jul 1-8, 2011, MIPT, Moscow, <a href="https://mipt.ru/abiturs/schools/leto/upload/c19/programma-arpqppqbi7e.pdf">https://mipt.ru/abiturs/schools/leto/upload/c19/programma-arpqppqbi7e.pdf</a>
54 <sup>th</sup> International Conference MIPT, Nov 25 – 30, 2011, MIPT, Moscow, <a href="https://mipt.ru/dppe/upload/a1d/book-fpfe-arpqw7qp77c.pdf">https://mipt.ru/dppe/upload/a1d/book-fpfe-arpqw7qp77c.pdf</a>
Seminar “Infinite-dimensional and Mathematical Physics”, Sep 6, 2012, MSU, <a href="http://ogs-seminar.narod.ru/index.htm">http://ogs-seminar.narod.ru/index.htm</a>
Seminar “Quantum probability, statistic, information”, May 23, 2012, Math. Inst. of Russ. Acad. for Sc.
International conference “Complex Analysis and Related Topics”, Math. Inst. of Russ. Acad. for Sc. (St. Petersburg), Apr 14 – 18, 2014, St. Petersburg, <a href="http://en.chebyshev.spb.ru">http://en.chebyshev.spb.ru</a>
57 <sup>th</sup> International Conference MIPT, Nov 24 – 29, 2014, MIPT, Moscow, <a href="http://www.machinelearning.ru/wiki/images/a/a4/MIPTconf-FIVT-2014.pdf">http://www.machinelearning.ru/wiki/images/a/a4/MIPTconf-FIVT-2014.pdf</a>
Seminar “Quantum Physics and Quantum Information”, May 26, 2015, MIPT, Moscow, <a href="https://mipt.ru/en/science/course/labs/QIT-lab/seminar.php">https://mipt.ru/en/science/course/labs/QIT-lab/seminar.php</a>
MIPT-UJC International Workshop, Oct 20 – 23, 2015, MIPT & P.N.Lebedev Phys. Inst. of RASc, <a href="http://sites.lebedev.ru/en/smfti/show.php?page_id=3214">http://sites.lebedev.ru/en/smfti/show.php?page_id=3214</a>
International conference “Relativity and Geometry”, Dec 14 – 16, 2015, IHP, Paris, <a href="http://monge.u-bourgogne.fr/gdito/lichnerowicz2015/en/index.php?page=home">http://monge.u-bourgogne.fr/gdito/lichnerowicz2015/en/index.php?page=home</a>
27 <sup>th</sup> Annual Laser Physics Workshop, Jul 16 – 20, 2018, University of Nottingham, Nottingham, <a href="https://www.lasphys.com/workshops/lasphys18">https://www.lasphys.com/workshops/lasphys18</a>

<b>MANAGER OF PROJECTS &amp; GRANTS</b>
Russian Foundation for Basic Research, № 18-32-00429 “Application of the weak-field asymptotic theory for solving the actual problems of modern attosecond physics”, 2018-2019
<b>PARTICIPATION IN PROJECTS &amp; GRANTS</b>
Russian Foundation for Basic Research, № 12-02-31524 “Quantum dynamics of mixed fermion and bosonic systems”, 2012-2013
State Assignment № 3.679.2014/K “The theory of interaction of many-electron

atoms, molecules and clusters with strong low-frequency laser pulses”, 2014-2016
Russian Foundation for Basic Research, № 17-02-00198 "Adiabatic theory of multichannel ionization of atoms and molecules by strong low-frequency laser pulses", 2017-2019
State Assignment № 3.873.2017/4.6 “Theory of mapping the structure of atoms and molecules in the spectra of electrons, ions and high harmonics observed in attosecond physics”, 2017-2019
Russian Science Foundation, № 16-11-00084 “Positive and nonlinear mappings in problems of qualitative and quantitative characterization of entangled multi-qubit states, quantum communication with entangled states, and quantum computations with nonlinear gates”, 2016-2018

<b>IT SKILLS</b>
MS Windows, Linux (parallel calculations on computational clusters using MPI, OpenMP <i>etc.</i> )
MS Office, LaTeX, gnuplot, GeoGebra, Avogadro <i>etc.</i>
Fortran

<b>INTERNATIONAL EXPERIENCE</b>
Guest researcher, Department of Physics and Astronomy, Aarhus University, Denmark, Jun 6 – 30, 2017.

<b>IN MEDIA</b>
<b>Russian</b>
РИА Новости <a href="https://ria.ru/science/20181203/1539025107.html">https://ria.ru/science/20181203/1539025107.html</a>
Naked Science <a href="https://naked-science.ru/article/column/fiziki-priblizilis-k-upravleniyu?utm_source=yxnews&amp;utm_medium=desktop">https://naked-science.ru/article/column/fiziki-priblizilis-k-upravleniyu?utm_source=yxnews&amp;utm_medium=desktop</a>
Чердак <a href="https://chrdrk.ru/news/novyj_algoritm_prolet_svet_na_tunnelnuyu_ionizaciyu?utm_source=yxnews&amp;utm_medium=desktop">https://chrdrk.ru/news/novyj_algoritm_prolet_svet_na_tunnelnuyu_ionizaciyu?utm_source=yxnews&amp;utm_medium=desktop</a>
Рамблер <a href="https://news.rambler.ru/tech/41365015-lazery-nauchat-dirizhivat-himicheskimi-reaktsiyami/?updated">https://news.rambler.ru/tech/41365015-lazery-nauchat-dirizhivat-himicheskimi-reaktsiyami/?updated</a>
Мукoлa <a href="https://mukola.net/fiziki-iz-rossii-nauchat-lazery-dirizhivat-himicheskimi-reaktsiyami-2/">https://mukola.net/fiziki-iz-rossii-nauchat-lazery-dirizhivat-himicheskimi-reaktsiyami-2/</a>
Дубна <a href="http://dubna.bezformata.com/listnews/fiziki-priblizilis-k-upravleniyu/71368709/">http://dubna.bezformata.com/listnews/fiziki-priblizilis-k-upravleniyu/71368709/</a>
<b>Foreign</b>
EurekaAlert <a href="https://www.eurekaalert.org/pub_releases/2018-12/miop-pec121018.php">https://www.eurekaalert.org/pub_releases/2018-12/miop-pec121018.php</a>

R&D Mag

<https://www.rdmag.com/news/2018/12/physicists-edge-closer-controlling-chemical-reactions>

PhysOrg

<https://phys.org/news/2018-12-physicists-edge-closer-chemical-reactions.html>

Photonics Online

<https://www.photonicsonline.com/doc/physicists-edge-closer-to-controlling-chemical-reactions-0001>

Space Daily

[http://www.spacedaily.com/reports/Physicists edge closer to controlling chemical reactions 999.html](http://www.spacedaily.com/reports/Physicists_edge_closer_to_controlling_chemical_reactions_999.html)