# **Curriculum Vitae**

Personal:	
First Name:	Sergey
Middle Name (Patronymic):	Valerievich
Last Name:	Marchenko
Date and Place of Birth:	06 August 1985, Odessa, Ukraine
Marital Status:	Single
Citizenship:	Ukraine
Address:	Department of Theoretical Physics, Physics Faculty,
	Odessa I. I. Mechnikov National University,
	2 Dvoryanskaya St., Odessa 65026,
	Ukraine
E-mail:	Sergey.Marchenko@onu.edu.ua
Phone Numbers:	+38 093 4108234, +38 066 2026801
Spoken Languages:	English; Russian (native); Ukrainian (native)

### **Education:**

- Postgraduate student, 2007-2010, Department of Theoretical Physics, Odessa I. I. Mechnikov National University, Odessa Ukraine. Ph.D. project: *"Excited electronic states in some low-dimensional structures"* (in progress). PhD adviser – Prof. Vadym Adamyan.
- Higher Education Diploma with Honours in theoretical physics, 2007, M.Sc. Degree, Odessa I.I. Mechnikov National University, Odessa Ukraine. Master's thesis: *'Stability of trionic excitations in carbon nanotubes''*. Scientific adviser – Prof. Vadym Adamyan.
- Higher Education Diploma with Honours in theoretical physics, 2006, B.Sc. Degree, Odessa I. I. Mechnikov National University, Odessa Ukraine. Bachelor's thesis: *'Excited states of excitons in 1D semiconductors''*. Scientific adviser Prof. Vadym Adamyan.

### Skills:

Theoretical physics, mathematics, methods of mathematical physics, mathematical software, numerical methods, programming (Delphi), Adobe Connect, LaTex.

### **Scientific Interests:**

Biophysics, Classical Mechanics, Computational Phylogenetics, Condensed Matter, Mathematical Physics, Mathematical Biology, Nanoscale Physics, Quantum Theory.

### **Teaching Experience:**

#### (Secondary school "Richelieu Lyceum", Odessa, Ukraine)

• Leader of School Team at The Ukrainian Young Physicist Tournament, 2005-2006 (Took second place on the all-Ukrainian tour).

### (Private school "Nika-M", Odessa, Ukraine)

• Physics, 2008-2009.

(Faculty of Physics, Odessa I. I. Mechnikov National University, Odessa, Ukraine)

- Introduction to Mathematical Analysis, 2006-2007.
- Classical Mechanics, 2007-2009.
- Methods of Mathematical Physics, 2008-2009.
- Quantum Mechanics, 2007-2011.

## (Department of Biological Physics, Odessa National Medical University, Odessa, Ukraine)

- Biophysics and Medical Physics, 2010-2013.
- Physics, 2010-2012.
- Mathematics, 2010-2012.
- Medical Informatics, 2010-2013.
- Further Mathematics for Pharmacists, 2011-2013.

## **Other Research Experience:**

- Engineer, Scientific-Research Institute of Physics, Odessa I.I. Mechnikov National University, Odessa, Ukraine, 2006-2008.
- Senior technician, Department of Theoretical Physics, Odessa I.I. Mechnikov National University, Odessa Ukraine, 2009-2010.

# Organizing experience:

- Member of organizing committee at the International Conference "*Modern Analysis and Applications*" (MAA 2007) dedicated to the centenary of Mark Krein, April 9–14, 2007, Odessa, Ukraine.
- Member of organizing committee at the International Symposium "*Physics of Complex Fluids*" in Memory of Alexander Vsevolodovich Zatovsky (1942-2006), June 6, 2012, Odessa, Ukraine.

# Participation in Conferences:

- International Students and Young Scientists Conference "HEUREKA-2007", May 22-24, 2007, Lviv, Ukraine.
- International Students and Young Scientists Conference "HEUREKA-2008", May 19-21, 2008, Lviv, Ukraine.
- Physics and Technology of Thin Films and Nanosystems, XII International Conference, May 18-23, 2009, Ivano-Frankivsk, Ukraine.
- Modern Problems of Theoretical Physics, December 24-26, 2009, Kiev, Ukraine.
- Modern Problems of Theoretical Physics, December 22-24, 2010, Kiev, Ukraine.
- Modern Problems of Theoretical Physics, December 21-23, 2011, Kiev, Ukraine.

#### **Publication List:**

- Vladimir Zavalniuk, Sergey Marchenko, "Theoretical analysis of telescopic oscillations in multi-walled carbon nanotubes", Low Temp. Phys. **37** (4): 337, (2011).
- Sergey Marchenko, "Stability of Trionic States in Zigzag Carbon Nanotubes", Ukr. J. Phys. 57, pp.1055-9, (2012).

### **Referee:**

- Prof. Dr. Sci. Vadim Adamyan Department of Theoretical Physics Odessa I.I. Mechnikov National University, 2 Dvoryanskaya St., Odessa 65026, Ukraine. E-mail: <u>vadamyan@onu.edu.ua</u>, Tel.: +38-048-7317556.
- Prof. Dr. Sci. Vladimir Kulinskii Department of Theoretical Physics Odessa I. I. Mechnikov National University, 2 Dvoryanskaya St., Odessa 65026, Ukraine. E-mail: <u>kulinskij@onu.edu.ua</u>, Tel.: +38-048-7317556.
- Prof. Dr. Sci. Mikola Malomuzh Department of Theoretical Physics Odessa I. I. Mechnikov National University, 2 Dvoryanskaya St., Odessa 65026, Ukraine. E-mail: <u>mnp@normaplus.com</u>, Tel.: +38-048-731.