Curriculum vitae

Oleh V. Ivakhnenko

Date of birth: September 24, 1995

Citizenship: Ukraine

E-mail: olegiv333@gmail.com

Education:

Graduate:

11.2019-present: B.Verkin Institute for Low Temperature Physics and Engineering

of the National Academy of Sciences of Ukraine, Kharkiv (Ukraine),

Department: Department of Superconducting and Mesoscopic Structures,

Ph.D. Student

Undergraduate:

09.2017-05.2019: V. N. Karazin Kharkiv National University, Kharkiv (Ukraine),

Faculty: Physics and Technology, Akhiezer Department of Theoretical Nuclear Physics and Higher Mathematics

Degree: Master in Physics

Thesis: “Landau-Zener-Stückelberg-Majorana transitions for interferometry and quantum control”

(supervisor: DSc S. N. Shevchenko, ILTPE)

09.2013-06.2017: V. N. Karazin Kharkiv National University, Kharkiv (Ukraine),

Faculty: Physics and Technology, Akhiezer Department of Theoretical Nuclear Physics and Higher Mathematics.

Degree: Bachelor in Physics

Thesis: “Dynamics of membrane for creation of memcapacitance”

(supervisor: DSc S. N. Shevchenko, ILTPE)

School:

05.2013: graduated from Kupyansk gymnasium № 3, Kupyansk, Kharkiv region (Ukraine).

Language: Ukrainian, Russian, English.

Selected Schools and Conferences:

14.11.2018 The All-RIKEN Workshop 2018, Wako (Japan) + poster “Classical simulation of seemingly quantum phenomena” O. V. Ivakhnenko, S. N. Shevchenko, and Franco Nori.

04.06.2018-08.06.2018 IX International Conference for Professionals & Young Scientists, B. Verkin Institute for Low Temperature Physics and Engineering of the NASU(Kharkiv, Ukraine)+ Oral presentation “Landau-Zener-Stückelberg-Majorana interferometry, latching modulation, and motional averaging – dynamical quantum phenomena simulated by coupled classical oscillators” O. V. Ivakhnenko, S. N. Shevchenko, and F. Nori

13.12.2017-17.12.2017 Winter school on Quantum Condensed-matter Physics, Condensed-matter physics Laboratory at the Higher School of Economics in Moscow(Russia)+poster: “Simulating quantum dynamical phenomena using classical oscillators” O.V. Ivakhnenko, S.N. Shevchenko and Franko Nori.

29.05.2017-02.06.2017 VIII International Conference for Professionals & Young Scientists, B. Verkin Institute for Low Temperature Physics and Engineering Kharkiv(Ukraine)+ poster: “Dynamics of buckled membranes for memcapacitor applications”

07.10.2016-14.10.16 International school & conference on nanoscience and quantum transport, Kyiv(Ukraine),+poster: “Simulating quantum dynamical phenomena by the mechanical resonator” O.V. Ivakhnenko and S.N. Shevchenko

Internships:

01.11.2018-30.04.2019 Intern on RIKEN IPA Program in RIKEN (Japan)

16.06.2018-04.08.2018 Intern on RIKEN’s Internship Program in RIKEN (Japan)

14.06.2017-03.07.2017 Intern on RIKEN’s Internship Program in RIKEN (Japan)

Publications:

Snap-through transition of buckled graphene membranes for memcapacitor applications, Ruslan D. Yamaletdinov, Oleg V. Ivakhnenko, Olga V. Sedelnikova, Sergey N. Shevchenko, Yuriy V. Pershin, Scientific Reports **8**, 3566 (2018).

Simulating quantum dynamical phenomena using classical oscillators: Landau-Zener-Stückelberg-Majorana interferometry, latching modulation, and motional averaging, O. V. Ivakhnenko, S. N. Shevchenko & Franco Nori, Scientific Reports **8** 12218(2018)

Parametric excitation of azimuthally nonsymmetric surface waves propagating in metal waveguides filled with isotropic plasma, V O Girka, I O Girka, R D Sydora, O Ivahnenko, and Y Shkoda, Phys. Scr. **90** (2015) 065605 (7pp).

Research work:

Currently, under the supervision of Prof. S.N. Shevchenko in B. Verkin Institute for Low Temperature Physics and Engineering, I am enrolled in the research work, within the Ph.D. project: "**Landau-Zener-Stückelberg-Majorana transitions for interferometry and quantum control**".

Hobby:

Programing, research work.

Achievements:

Participation in the Grant of President of Ukraine (head: Dr. S.N. Shevchenko),
9-12.2016,
10-12.2019

30.03.2019: Prize for young scientists and students of higher educational institutions for the best scientific work, National Academy of Science Ukraine.

11.2018-04.2019: participation in the RIKEN International Program Associate (IPA scholarship).

03.2018: third place at the all-Ukrainian competition of student research works.

05.2013: diploma of best school-leaver of Kharkiv region.