CURRICULUM VITAE

Anna Muranova

November 3, 2018

Personal details

Name: Anna Muranova.

Date of birth: 15 November 1991.

Place of birth: Vitebsk, Republic of Belarus.

Citizenship: Republic of Belarus.

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Spoken languages: Russian (mother tongue), English, German (B1), Polish (C1), Spanish.

Present mathematical interests: Laplace operator on graphs, Differential operators on graphs, Electric networks, Markov chains and Probability Theory.

Programming languages: Pascal, C, C++, Java, SQL.

Education

01.09.2009 – 30.06.2014: Student of the Math. Department of Belarusian State University (Minsk, Belarus). Graduated with a diploma with honors.

Qualification: mathematician.

Diploma/Master thesis: "Varieties of representations of finitely generated groups."

Abstract of the diploma thesis: Varieties of low-dimensional representations of some finitely generated groups were considered and some theorems about the number of irreducible components were proved. As auxiliary results, dimensions of commutator varieties for matrices of dimensions 2, 3 and 4 were calculated.
Grade for the diploma thesis: 10/10.

01.10.2016 – present time: Doctoral Student of the International Research Training Group 2235 at the Math. Department of Bielefeld University (Bielefeld, Germany).

Attendance at conferences and workshops

- Young Women in Mathematical Physics (September 24 - 28, 2018, Bonn, Germany)
- The 6th Gdańsk Workshop on Graph Theory (July 1 - 4, 2018, Gdańsk, Poland)
- Sixth Bielefeld - SNU Joint Workshop in Mathematics (March 15 - 17, 2018, Seoul, South Korea)
- Final conference: Discrete and Continuous Models in the Theory of Networks (November 27 - December 1, 2017, Bielefeld, Germany)
- Analysis and Geometry on Graphs and Manifolds (July 31 - August 4, 2017, Potsdam, Germany)
- Fifth Bielefeld - SNU Joint Workshop in Mathematics (February 22 - 25, 2017, Bielefeld, Germany)
- 71st scientific conference of undergraduate and graduate students of Belarusian State University, (May 18 - 21, 2014, Minsk, Belarus)

Talks and posters

- Poster "Conservation of complex power in electric network" (Workshop "Young Women in Mathematical Physics", September 24 - 28, 2018, Bonn, Germany).
- Talk "Electric networks and complex-weighted graphs" (The 6th Gdańsk Workshop on Graph Theory, July 4, 2018, Gdańsk, Poland).
- Poster "Electric networks with impedances" (Sixth Bielefeld - SNU Joint Workshop in Mathematics, March 17, 2018, Seoul, South Korea).
- Talk "On effective impedance of electric networks" (Geometric Analysis Seminar, December 5, 2017, Bielefeld, Germany).
- Talk "On varieties of representations of finitely generated groups" (71st scientific conference of undergraduate and graduate students of Belarusian State University, May 18 - 21, 2014, Minsk, Belarus)

Research stays

- Seoul National University, March 2 - August 25, 2018 (Seoul, South Korea)

Practical work experience

01.10.2012 – 01.06.2013: Laboratory assistant at Research Institute for Applied Problems of Mathematics and Informatics of Belarusian State University (Minsk,

Belarus). At this period I participated in a project on investigating genetic sequences (DNA) using probability theory.

Publications

1. Muranova A. *On dimensions of commutator varieties in case of low-dimensional matrices.* Proceedings of 71th scientific conference of undergraduate and graduate students of Belarusian State University, Minsk, May 18–21, 2014: in 3 parts, Part 1, pp. 18–22. – Minsk : Publishing center of BSU, 2014. (In Russian: Муранова А. Ю. *О размерностях коммутаторных многообразий в случае матриц малой размерности.* Сборник работ 71-й научной конференции студентов и аспирантов Белорусского государственного университета, Минск, 18–21 мая 2014 г. : в 3 ч. Ч. 1, стр. 18–22. – Минск : Изд. центр БГУ, 2014.)