

Anatoli Shatsila

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I am interested in complex abelian varieties, Jacobians, Prym varieties, tensors and their invariants.

EDUCATION

- **Jagiellonian University, Faculty of Mathematics and Informatics** Krakow, Poland
PhD in Mathematics October 2023 -
- **Jagiellonian University, Faculty of Mathematics and Informatics** Krakow, Poland
Master of Mathematics (Pure Mathematics); GPA: 4.96/5.0 (distinction) October 2021 - July 2023
- **Jagiellonian University, Faculty of Mathematics and Informatics** Krakow, Poland
Bachelor of Mathematics (Pure Mathematics); GPA: 4.95/5.0 October 2018 - July 2021

PUBLICATIONS AND PREPRINTS

- P. Borówka and A. Shatsila, *Pryms of $\mathbb{Z}/3\mathbb{Z} \times \mathbb{Z}/3\mathbb{Z}$ coverings of genus 2 curves*, preprint (2025).
- P. Pielasa, M. Šafránek, A. Shatsila, *Exact values of generic subrank*, *Advances in Mathematics* (2025), vol. 469.
- P. Borówka and A. Shatsila, *Hyperelliptic genus 3 curves with involutions and a Prym map*, *Mathematische Nachrichten* (2024), published online.
- A. Shatsila, *Geometry of elliptic normal curves of degree 6*, *Communications in Algebra* (2023), 1-15.
- W. Guifeng, T. Disheng, A. Shatsila and X. Zhang, *MICA: Multi-channel Representation Refinement Contrastive Learning for Graph Fraud Detection*, *APWeb-WAIM 2023*.

GRANTS AND RESEARCH ACTIVITIES

- Principal investigator in Polish National Science Center project Preludium K/NCN/000481 *"Low degree coverings of genus two curves"* (in Polish: Nakrycia niskiego stopnia krzywych genusu 2). 02.2025-present
- Research student in Polish National Science Center project 2019/35/D/ST1/02385 *"Klein coverings of complex curves"* (in Polish: nakrycia Kleina krzywych zespolonych). Principal investigator: Paweł Borówka 10.2021-07.2023
- Reviewer on Zentralblatt MATH

SCHOLARSHIPS

- Franciszek Leja scholarship – awarded to the best Master student(s) at Jagiellonian university (2023)
- Minister's of Education and Sciences scholarship – the scholarship was awarded to 3 mathematics students at the university (2023)
- Excellence Initiative programme – awarded to 5 best students in the cohort (2021/22 and 22/23)
- Rector's Scholarship – awarded to best 10% students in the cohort (2021/22 and 22/23)
- "Szkoła orłów" Scholarship – Ministry of Science and Higher Education programme awarded to 20 students at Jagiellonian University (2019)
- Franciszek Mertens Scholarship – A full 5-year scholarship for international students; awarded to 4 students (2nd edition, 2018)

HONORS AND AWARDS

- International Mathematics Competition for University Students, 2019 – Second Prize; 2020, 2021, 2022 – First Prize
- Student Thesis in Mathematics Contest named after Józef Marcinkiewicz, January 2022 - Third Diploma
- Mirror of William Lowell Putnam Mathematical Competition, 2018 – Second Prize, 2019 – Third prize
- International Tournament of Young Mathematicians: 2017 – First Prize, 2018 – Grand First Prize (Team Belarus)
- Final Stage of Belarusian National School Olympiad in Mathematics, 2015 – First Prize; 2016, 2017, 2018 – Second Prize

CONFERENCES AND SUMMER SCHOOLS

- GAEL XXXII Toulouse, France 16-20.06.2025
Poster 'Prym map of $\mathbb{Z}/3\mathbb{Z} \times \mathbb{Z}/3\mathbb{Z}$ -covers of genus 2 curves'
- Birational Geometry: from moduli to geography Barcelona, Spain 05-07.02.2025
- Syzygies and Hilbert Schemes Kraków, Poland 24-28.09.2024
- MATH AMSUD workshop on Algebraic Geometry Nice, France 17-21.06.2024
- 5th National Polish Conference "Oblicza Algebry" Kraków, Poland 01-04.06.2023
- Quiver Representations, Quiver Varieties and Combinatorics Bologna, Italy 22-26.05.2023
- Explicit Algebraic Geometry Bedlewo, Poland 16-20.04.2023
- Algebraic Geometry on the occasion of Sandro Verra's 70th birthday Rome, Italy 14-17.06.2022
Poster 'Geometry of elliptic normal curves of degree 6'

TALKS

- The Prym map of non-cyclic 9-coverings of genus 2 curves *AG Seminar at JU* 17.03.2025
- Hyperelliptic genus 3 curves with involutions and Prym map *Seminari de Geometria Algebraica de Barcelona* 25.10.2024
- Hyperelliptic genus 3 curves with involutions and Prym map *MATH AMSUD workshop on Algebraic Geometry* 19.06.2024
- Elliptic normal curves of degree 6 *Oblicza Algebry Conference* 04.06.2023
- Additional involutions on hyperelliptic genus 3 curves and a Prym map *AG Seminar at JU* 24.04.2023
- Linear algebraic groups. Parabolic and Borel subgroups *AG Seminar at JU* 09.01.2023
- Relations between two criteria for supersingularity of an elliptic curve *NT Seminar at JU* 24.11.2022
- Introduction to Intersection Theory in Algebraic Geometry *AG Seminar at JU* 15.11.2021
- Geometry of elliptic normal curves of degree 6 *AG Seminar at JU* 25.10.2021

FOREIGN VISITS

- University of Barcelona (Spain), 2 weeks, 2024
- University of Konstanz (Germany), 2 weeks, 2023

COMPUTER SKILLS AND LANGUAGES

- **Programming:** Python (Pytorch, Tensorflow), Haskell, C++, Git
- **Mathematics software:** \LaTeX , Sage, Magma, Macaulay2
- **Languages:** English (proficient), Polish (proficient), Belarusian (native), Russian (native)