Anatoli Shatsila

Email: anatoli.shatsila@doctoral.uj.edu.pl Mobile: +48-730-380-766

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

EDUCATION

•	Jagiellonian University, Faculty of Mathematics and Informatics PhD in Mathematics	Krakow, Poland October 2023 -
•	Jagiellonian University, Faculty of Mathematics and Informatics Master of Mathematics (Pure Mathematics); GPA: 4.96/5.0 (distinction)	Krakow, Poland October 2021 - July 2023
•	Jagiellonian University, Faculty of Mathematics and Informatics Bachelor of Mathematics (Pure Mathematics); GPA: 4.95/5.0	Krakow, Poland 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	$Krak\'ow,\ Poland$	24-28.09.2024
• MATH AMSUD workshop on Algebraic Geometry	Nice, France	17-21.06.2024
• 5th National Polish Conference "Oblicza Algebry"	$Krak\'ow,\ Poland$	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 Poster 'Geometry of elliptic normal curves of degree 6'	$Rome,\ Italy$	14-17.06.2022

Talks

• Exact values of generic subrank	IMPANGA	06.06.2025
• 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

 \bullet Hyperelliptic genus 3 curves with involutions and Prym map $\it MATH\ AMSUD\ workshop\ on\ Algebraic\ Geometry\ 19.06.2024$

• Elliptic normal curves of degree 6	Oblicza Algebry Conference	04.06.2023
\bullet 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)