

Neža Žager Korenjak

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Research interests: hyperbolic & affine geometry, (higher) Teichmüller theory, geometric group theory

Education	University of Texas at Austin Ph.D. Program in Mathematics advisor: Jeffrey Danciger	<i>Expected Spring 2023</i>
	University of Ljubljana Bologna second cycle master's study program, Mathematics	2016
	Master's thesis: <i>Hypercyclic Operators</i> ◊ advisor: Roman Drnovšek	
	Bologna first cycle academic study program, Mathematics	2014
	Undergraduate thesis: <i>Theorems on Compactness</i> ◊ advisor: Žiga Virk	
Papers	<i>Constructing proper affine actions via strip deformations.</i> arXiv: 2205.14712 (submitted)	2022
	<i>Theorems on compactness.</i> Overview article. <i>Matrika</i> 1 (2014) 4 .	
Research talks & presentations	<i>Constructing proper affine actions via higher strip deformations</i> University of Maryland geometry seminar	December 2022
	<i>Constructing proper affine actions via higher strip deformations</i> University of Virginia geometry seminar	September 2022
	<i>Constructing proper affine actions via higher strip deformations</i> Nearly carbon neutral topology & geometry conference (virtual.)	September 2022
	<i>Constructing proper affine actions</i> GT GAPS (virtual.)	July 2022
	<i>Proper affine actions of free groups</i> , lightning talk. Geometry, Arithmetic, and Groups, UT Austin	June 2022
	<i>Constructing proper affine actions of Fuchsian groups</i> , poster presentation. Graduate student topology and geometry conference, Georgia Tech	April 2022
	<i>Constructing proper affine actions</i> TWIMS 2022, Rice	February 2022
	<i>Constructing proper affine actions</i> The University of Sherbrooke, SAG seminar	October 2021
	<i>Constructing proper affine actions</i> , contributed talk GTA Philadelphia (virtual.)	May 2021
	<i>Constructing proper affine actions</i> , contributed talk Graduate student topology and geometry conference (virtual.)	April 2021
Honors and Awards	Frank Gerth III teaching excellence award ◊ <i>UT Austin</i>	2020
	Provost's Graduate Excellence Fellowship ◊ <i>UT Austin</i>	2016 - 2021
	State merit scholarship (Zois scholarship) <i>rewarded by Republic of Slovenia</i>	2007 - 2014
	Dean's Award for academic achievement in the first year of study <i>University of Ljubljana</i>	2012
	Honorable mention at International Mathematical Olympiad	2011
	Bronze medal at Middle-European Mathematical Olympiad	2010

Teaching	Assistant Instructor at the University of Texas at Austin <i>Learning assistant experience in math (M 371E)</i> A class for undergraduates about math pedagogy, where they get hands-on experience tutoring at CalcLab, which I am also organizing.	Fall 2021 - present	
	Summer mini-course leader <i>Measured laminations and train tracks</i> Led a weeklong online course aimed at graduate students as part of UT's Summer minicourse program	Summer 2021	
	Mentor at the University of Texas at Austin's Geometry Lab Mentored a small group of undergraduates in a computer visualization problem in projective geometry, helped make the project's website	Spring 2021	
	Teaching Assistant at the University of Texas at Austin <i>Differential Equations with Linear Algebra (M 427J)</i> <i>Honors Advanced Calculus for Applications II (M 427L)</i> <i>Advanced Calculus for Applications II (M 427L)</i> <i>Differential Calculus (M 408K)</i>	Spring 2020 Fall 2019 Spring 2019 Fall 2018	
	Teaching Assistant at the University of Ljubljana <i>Computer Practical</i> <i>Mathematics 1, Grader</i>	Fall 2015 Spring 2015 - Summer 2016	
	Additional training and certificates <i>Inclusive Classrooms Leadership Certificate</i> <i>Inclusive Instructor Certificate</i>	UT Austin, 2022 UT Austin, 2022	
	Outreach	DRP Mentor at the University of Texas at Austin Mentored undergraduates in reading projects on hyperbolic geometry, knot theory, low-dimensional topology, number theory, differential geometry	Spring 2017 - present
		Volunteer at a tutoring pod at local middle school Helped middle school math teachers hold virtual office hours for students.	Fall 2020
		Speaker and volunteer at SMMG <i>an outreach program about mathematics aimed at middle and high schoolers</i> Regular volunteer & gave two talks: <i>An invitation to non-Euclidean geometry</i> <i>The Towers of Hanoi</i>	Spring 2020 Fall 2018
		UT Math Club speaker <i>Hyperbolic geometry</i>	Spring 2020
Co-organizer and mentor of MaRS <i>a Slovenian summer math camp for high schoolers</i>		August 2015	
Volunteer tutor for undergraduate students at University of Ljubljana		Fall 2013- Spring 2016	
Leader and speaker of a math club for middle schoolers <i>dealing with fun math problems and preparations for math competitions</i>		2010-2011	
Service	Graduate Representative serving on an elected committee of math grad students that helps deal with grad student concerns and well-being, organizes social and academic events, and helps mediate between students and faculty	2020-2021, 2022-2023	
	Graduate Student Association Represented the math department graduate students in the legislative association of all UT Austin grad students	2020-2021	
	Organizer of the Junior Topology Seminar The University of Texas at Austin	Spring 2020	
	Co-organizer of the Geometric Topology seminar The University of Texas at Austin	Spring 2018-Spring 2022	
	Co-organizer of the Teichmüller theory learning seminar The University of Texas at Austin	Spring 2019	

Co-organizer of Directed Reading Program, UT Austin
*pairing graduate students in mathematics and related fields with
 undergraduate students interested in getting started in mathematical
 research to work on a reading project together, and organising
 the symposium for students to present their work*

Spring 2019 - Spring 2021

Conferences attended	<i>Nearly Carbon Neutral Geometric Topology</i> ◊ virtual	<i>September 2022</i>
	<i>Geometry, Arithmetic, and Groups</i> ◊ UT Austin	<i>June 2022</i>
	<i>Groups, Geometry and Dynamics</i> ◊ Cargèse	<i>June 2022</i>
	<i>GTA Philadelphia</i> ◊ Temple University	<i>May 2022</i>
	<i>Graduate Student Topology and Geometry Conference</i> Georgia Tech	<i>April 2022</i>
	<i>Texas Geometry and Topology Conference</i> ◊ UT Dallas	<i>February 2022</i>
	<i>TWIMS</i> ◊ Rice	<i>February 2022</i>
	<i>Virginia Topology Conference (Geometry and dynamics in hyperbolic space)</i> University of Virginia	<i>November 2021</i>
	<i>Workshop on Anosov representations</i> ◊ Aussois	<i>September 2021</i>
	<i>Beyond Hyperbolicity</i> ◊ The Ohio State University	<i>July 2021</i>
	<i>Nearly Carbon Neutral Geometric Topology</i> ◊ virtual	<i>June 2021</i>
	<i>GTA Philadelphia</i> ◊ virtual	<i>May 2021</i>
	<i>Graduate Student Geometry and Topology Conference</i> University of Indiana Bloomington (virtual)	<i>April 2021</i>
	<i>Virtual Topology Festival</i> ◊ NUS(virtual)	<i>January 2021</i>
	<i>Nearly carbon neutral geometric topology</i> ◊ virtual	<i>June 2020</i>
	<i>Aspects of Geometric Group Theory</i> ◊ IHES	<i>July 2019</i>
	<i>yGGT VIII</i> ◊ Bilbao	<i>June 2019</i>
	<i>Young Topologists Meeting</i> ◊ Copenhagen	<i>July 2018</i>
	<i>Representation varieties and geometric structures in low dimensions</i> ◊ Warwick	<i>July 2018</i>
	<i>Thin groups in Number Theory, Geometry and Topology</i> ◊ Rice	<i>May 2018</i>
	<i>Geometry of Teichmüller space and mapping class groups</i> ◊ Warwick	<i>April 2018</i>
	<i>Texas Geometry and Topology Conference</i> ◊ UT Austin	<i>November 2017</i>
	<i>Young Topologists Meeting</i> ◊ Stockholm	<i>July 2017</i>
<i>Graduate Student Conference in Algebra, Geometry, and Topology</i> Temple University	<i>June 2017</i>	
<i>Graduate Student Conference in Geometry and Topology</i> Michigan State University	<i>April 2017</i>	
<i>Texas Geometry and Topology Conference</i> ◊ Texas A&M	<i>November 2016</i>	
<i>Summer School on Computational Topology</i> ◊ University of Ljubljana	<i>June 2015</i>	