

## Kürsat Yılmaz

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CONTACT INFORMATION	Department of Mathematics and Statistics University of Toledo Toledo, OH, USA	kursat.yilmaz@rockets.utoledo.edu
RESEARCH INTERESTS	Low Dimensional Topology, Symplectic Geometry, Dynamical Systems, Hamiltonian Mechanics	
EDUCATION	<b>University of Toledo</b> , Toledo, Ohio PhD, <i>Mathematics</i> , Expected May 2025 Thesis Title: <i>Contact Geometry of the Restricted Three-body Problem on the Unit Sphere</i> <ul style="list-style-type: none"><li>• Advisor: <i>Alessandro Arsie</i></li></ul> <b>Middle East Technical University (METU)</b> , Ankara, Türkiye M.S., <i>Mathematics</i> , June 2018 Thesis Title: <i>Tight Contact Structures on Small Seifert Fibered Spaces</i> <ul style="list-style-type: none"><li>• Advisor: <i>Mehmet Firat Arkan</i></li></ul> <b>Middle East Technical University</b> , Ankara, Türkiye B.S., <i>Mathematics</i> , June 2015	
WORK EXPERIENCE	University of Toledo, Teaching Assistant MathCorps in University of Toledo METU, Teaching Assistant Yandex, Türkiye, Search Engine Assessor	2019 - Present Summer 2024 2015 - 2019 2014 - 2015
PAPERS AND PREPRINTS	<ul style="list-style-type: none"><li>• <i>Contact Geometry of the Restricted Three-Body Problem on <math>\mathbb{S}^2</math></i> (with Alessandro Arsie) (Preprint)</li></ul>	
AWARDS AND GRANTS	<ul style="list-style-type: none"><li>• Excellence in Teaching, MathCorps, Summer 2024</li><li>• Certificate of Excellence (Tutoring) 2024, Utoledo</li><li>• Certificate of Excellence (Tutoring) 2020, UToledo,</li><li>• Graduate Course Performance Award (Best Student in MS program) 2017, METU,</li><li>• <i>Asian and European Schools in Mathematics - CIMPA, France</i>, Directed Reading Program Türkiye 2024, €4000,</li><li>• <i>Asian and European Schools in Mathematics - CIMPA, France</i>, Directed Reading Program Türkiye 2023, €4000,</li><li>• <i>Existence of Tight Contact Structures on Closed Hyperbolic 3-Manifolds</i>, BAP Project (BAP-20180092) (Researcher) 2016, METU.</li></ul>	

TEACHING  
EXPERIENCE

**Middle East Technical University**

Ankara, TURKIYE

MATH 117 - Calculus I  
MATH 118 - Calculus II  
MATH 119 - Calculus with Analytic Geometry  
MATH 120 - Calculus of Functions of Several Variables  
MATH 250 - Advanced Calculus in Statistics  
MATH 251 - Advanced Calculus I,  
MATH 252 - Advanced Calculus II  
MATH 367 - Abstract Algebra

**University of Toledo**

Toledo, OHIO

MATH 1320 - College Algebra - Instructor  
MATH 1850 - Calculus I  
MATH 1860 - Single Variable Calculus II  
MATH 2860 - Elementary Differential Equations  
MATH 2890 - Numerical Methods and Linear Algebra

RESEARCH TALKS

**Contact Geometry of the Restricted 3-Body Problem on the Unit Sphere,**  
Buckeye Metric Geometry Workshop, August 16-18, 2024, Ohio State University

**Contact Geometry of the Restricted 3-Body Problem on the Unit Sphere,**  
49th Annual Mathematics Conference, Sep 30, 2023, Miami University, Ohio

**Contact Geometry of the Restricted 3-Body Problem on the Space of Positive Constant Curvature,**  
Georgia Topology Conference, May 25, 2023, University of Georgia.

**Restricted 3-Body Problem on the Space of Constant Curvature,**  
Colloquium, May 10, 2023, Yozgat Bozok University.

**Contact Geometry of the Restricted 3-body Problem on 2-Sphere,**  
UToledo AMS-Graduate Student Seminars, February 6, 2023.

**Tight Contact Structures on Brieskorn Homology Spheres  $\Sigma(2, 3, 6n+1)$ ,**  
Tech Topology Conference, December 8, 2019, Georgia Institute of Technology.

**Topological Surgery in 3-dimensional Manifolds,**  
Graduate Seminar, October 2 and October 16, 2019, University of Toledo.

**Tight Contact Structures on Some Small Seifert Fibered Spaces,**  
Differential Equations and Nonlinear Analysis, September 10 and September 24, 2019, University of Toledo.

**Tight Contact Structures on Small Seifert Fibered Spaces,**  
Geometry-Topology Seminar, November 5, November 12 and November 19, 2018, METU.

**Tight Contact Structures on The Brieskorn Homology Spheres,**  
 Winter Workshop 2017, Gökova Geometry Topology Institute, December 25–29,  
 2017, Turkiye.

**Obstructing Pseudo-Convex Embeddings of Brieskorn Spheres in Complex  
 2-Space,**  
 Graduate Seminar, April 25, 2017, METU.

CONFERENCES,  
 WORKSHOPS AND  
 SUMMER SCHOOLS

<b>Big Ideas in Dynamics</b> University of Illinois Chicago, Chicago, IL	September 2024
<b>Buckeye Metric Geometry Workshop</b> Ohio State University, Columbus, OH	August 2024
<b>49th Annual Mathematics Conference</b> Miami University, Oxford, OH	September 2023
<b>Northwestern 2023 Dynamics Summer School</b> Northwestern University, Evanston, IL	June 2023
<b>2023 Georgia Topology Conference</b> University of Georgia, Athens, GA	May 2023
<b>27th Gökova Geometry and Topology Conference</b> Gökova, Turkiye	May 2022
<b>2022 Midwest Dynamical Systems Conference</b> IUPUI, Indianapolis, IN	November 2022
<b>Lie Theory and Poisson Geometry</b> CIRM, Marseille, France	January 2022
<b>A Brief Introduction to Ergodic Theory</b> Virtual, organized by IMPA, Brazil	August 2021
<b>Nijenhuis Geometry and Applications</b> Virtual	August 2021
<b>Miniworkshop on Hamiltonian Systems and Group Actions</b> Virtual	June 2021
<b>Invariant Manifolds in Celestial Mechanics and Astrodynamics</b> Virtual, organized by IMPA, Brazil	June 2021
<b>Floer Theory and Hamiltonian Dynamics on Non-Compact Hypersurfaces</b> Virtual	January 2021
<b>The Eight Pacific Rim Conference in Mathematics</b> Virtual	August 2020
<b>Dynamics on Your Screen</b> Virtual	August 2020
<b>Tech Topology Conference</b> Georgia Institute of Technology, Atlanta, GA	December 2019
<b>Midwest Several Complex Variables Conference</b> University of Michigan-Dearborn, Dearborn, MI	October 2019

<b>26th Gökova Geometry and Topology Conference</b> Gökova, Türkiye	May 2019
<b>Algebraic Topology: Methods, Computation and Science (ATMCS8)</b> IST-Austria, Klosterneuburg, Vienna, Austria	June 2018
<b>25th Gökova Geometry and Topology Conference</b> Gökova, Türkiye	May 2018
<b>Winter Workshop 2017, Gökova Geometry Topology Institute</b> Gökova, Türkiye	December 2017
<b>Applied Topology in Bedlewo 2017</b> Bedlewo, Poland	June 2017
<b>24th Gökova Geometry and Topology Conference</b> Gökova, Türkiye	May 2017
<b>I. Summer School of Association for Turkish Women in Maths</b> METU, Ankara, Türkiye	June 2016

#### OUTREACH AND SERVICES

- **Mentor and Teacher** MathCorps at UToledo Summer 2024
- **Mentor and Organizer** Directed Reading Program Türkiye 2023 - 2024
- **Treasurer** AMS Graduate Student Chapter 2021-2023
- **Mentor** Directed Reading Program Türkiye 2022
- **Treasurer** Turkish Mathematical Society, Ankara Branch 2018-2019