Nur Sağlam — CV

Boyd Research and Education Center, UGA, School of Mathematics, Athens, GA, 30602

(+1) 404 916-9119 • nurmath7@uga.edu

sites.google.com/umn.edu/nursaglammath

EDUCATION

Ph.D, University of Minnesota   **2011-2017**
Mathematics, Minnesota/ USA
Thesis Title: *Construction of Exotic Symplectic 4-Manifolds and Fillings of Contact 3-Manifolds*
Advisor: Anar Akhmedov

M.A., Middle East Technical University   **2007-2011**
Mathematics, Ankara/ TURKEY

B.S., Aegean University   **2001-2006**
Mathematics, İzmir/ TURKEY

RESEARCH INTEREST

Low Dimensional Topology, Symplectic Topology and Contact Topology.
In particular, Classification Problems for Smooth and Symplectic 4-Manifolds, Exotic Smooth
Structures on Small 4-Manifolds, Symplectic Fillings of Contact 3-Manifolds.

PROFESSIONAL EMPLOYMENT

University of Georgia   Limited Term Instructor, 2023-present

Georgia Institute of Technology   Visiting Research Scholar, 2022-2023

Koc University   Visiting Assistant Professor, 2021-2022

Virginia Polytechnic Institute and State University   Visiting Assistant Professor, 2019-2021

University of California, Riverside   Visiting Assistant Professor, 2017-2019

PUBLICATIONS

1. Construction of Exotic 4-manifolds via Cyclic Group Actions, with Anar Akhmedov & Mohan Bhupal, in preprint
2. Cubiquitous Lattices and χ-sliceness, with Erica Choi, Jonathan Simone, Katerina Stuopis & Hugo Zhou, https://arxiv.org/abs/2405.00500

3. Surgeries on the Trefoil and Symplectic Fillings, with John Etnyre, `https://arxiv.org/pdf/2308.00068`
4. Constructing Lefschetz Fibrations via Cyclic Group Actions I, with Anar Akhmedov, Advanced Mathematical Models & Applications, 2019, Vol.4, No 1, pp.$15-50$,
5. New Exotic 4-Manifolds via Luttinger Surgery on Lefschetz Fibrations, with Anar Akhmedov, Int. J. Math., 2015, Vol.26(1), pp.$179-200$, `https://drive.google.com/open?id=1zk4cVbRo4mIdDI4IXe9H-ymOUY3Sgwve`

AWARDS&GRANTS&HONORS

○ Four "Thank a Teacher" letters, UGA, 2022-2023, 2023-2024
○ TÜBİTAK-2219-International Postdoctoral Research Fellowship Program, 2022-2023
○ Principles of Effective Teaching Certificate, Virginia Tech, 2019-2020
○ "Thank a Teacher" letter, Virginia Tech, 2020
○ NSF Research Fellowship, funded by Anar Akhmedov's NSF grants FRG-0244663
   Spring 2014, Summer 2012, Spring 2012, Fall 2011
○ TÜBİTAK-2211-National Scholarship Program for PhD Students, 2008-2011

DEPARTMENTAL SERVICE&ORGANIZATIONS

○ AMS Fall Southeastern Sectional Meeting at Southern Georgia University in Savannah, GA, Recent Advances in Contact and Symplectic Topology, Organizer, October 5-6, 2024
○ UGA-GT Joint Topology Seminars, Coorganizer, 2023-2024 and 2024-2025
○ Research Experience for Undergraduates (Summer 2023)
○ Tech Topology Summer School on L-Space Conjecture, Georgia Tech, School of Mathematics, Coorganizer, July 24-28, 2023
○ AMS Spring Sectional Meeting at Georgia Tech, Coorganizer, March. 18-19, 2023
○ Tech Topology Conference, Georgia Tech, School of Mathematics, Coorganizer, Dec 9-11, 2022
○ Geometry&Topology Seminar, Virginia Tech, School of Mathematics, Coorganizer, 2019-2021
○ Contest Committee Virginia Tech (Undergrad Math Competitions), School of Math, 2019-2021
○ AMS Fall Western Sectional Meeting at UCR, Symplectic and Low Dimensional Topology Session, Organizer, Nov. 9-10, 2019
○ PUTNAM Math Competition Training, UCR, Fall 2018
○ Student Symplectic and Low Dimensional Topology Seminar, University of Minnesota, School of Mathematics, Organizer, 2014-2017

INVITED TALKS

○ **Fillability of Contact Structures on the 3-manifolds obtained by surgeries on the trefoil knot**
  - AMS Sectional Meeting at Florida State University in Tallahassee, FL, Topological Interactions of Contact and Symplectic Manifolds, March 23-24, 2024
  - Rochester University Geometry Seminars, Oct 27, 2023
  - SEC Geometry and Topology Workshop , University of Alabama, Tuscaloosa, AL, June 2-4, 2023

- University of Virginia, Topology Seminar, April 26, 2023
- North Carolina State University, Triangle Topology Seminar March 22, 2023
- GT& UGA Topology Joint Seminar, November 16, 2022

- ○ **Colloquium Talks**
  - "Geography Problem of Symplectic 4-Manifolds", Gebze Technical University, Jun 11, 2021
  - "Topology and Fun", Izmir University of Economics, Izmir/Turkey, April 4, 2021

- ○ **Construction of Lefschetz Fibrations Via Cyclic Group Actions**
  - Rochester University Geometry Seminars, Sep 22, 2023
  - AMS Sectional Meeting at University of Tennesse at Chattanooga, October 15-16, 2022
  - JMM 2022: Women and Gender Minorities in Symplectic and Contact Geometry, Apr 6-9, 2022
  - METU Geometry Topology Seminar, Ankara/Turkey, April 26, 2021
  - AMS Sectional Meeting at UVA, Virginia, March 13-15, 2020
  - UCI Topology Seminar, California, March 9, 2020
  - Lefschetz Fibration Day Hacettepe University, Ankara/Turkey, January 10, 2020
  - 26th Gökova Geometry/Topology Conference, Muḡla/Turkey, May 26-30, 2019
  - Moab Topology Conference, Utah State University, May 9-11, 2019
  - Boḡaziçi University, IMBM, Istanbul, Turkey, March 28, 2019
  - Bilkent University, Geometry/Topology Seminar, Ankara/Turkey, March 26, 2019
  - UC Davis, Geometry/Topology Seminar, January 29, 2019
  - JMM 2019, AMS Special Session on Women in Topology, Baltimore, January 16-19, 2019
  - 5th Midwest Women in Mathematics Symposium, IUPUI, Indianapolis, February 25, 2017
  - Symplectic Geometry and Contact Geometry, AMS Sectional Meeting at St. Thomas, October 28-30, 2016

- ○ **Strongly Fillable but not Stein Fillable Contact Structures on 3-manifolds $-\Sigma(2, 2g+1, 2(2g+1)n-1)$**
  - Geometry/Topology Seminar, METU, Department of Mathematics, Ankara, Turkey, May 23, 2016.
  - IMBM, Bogazici University, Department of Mathematics, İstanbul, Turkey, May 18, 2016.
  - Special Session on Low Dimensional and Symplectic Topology at the AMS Sectional Meeting at North Dakota State University in Fargo, North Dakota, April 16-17, 2016.

- ○ **New Exotic 4-Manifolds via Luttinger Surgery on Lefschetz Fibrations**
  - Topology Seminar at University of Oregon, Eugene, Oregon, February 27, 2018
  - Topology Seminar at University of Arkansas, Fayetteville, Arkansas, September 8, 2017
  - JMM 2017, AMS Special Session on Women in Topology, Atlanta, January 4-7, 2017
  - Differential Geometry and Symplectic Topology Seminar at UMN, October 23, 2014.
  - 12th Annual Graduate Student Top.&Geo. Conf. at Uni. of Texas at Austin, April 5-6, 2014.

RECENT CONFERENCES & WORKSHOPS ATTENDED

1. Trisectors Workshop 2023, Connections with Symplectic Topology, University of California, Davis June 26 - June 30, 2023
2. Topology Festival, Cornell University, May 5-7 2023
3. NCNGT 2022, The Nearly Carbon Neutral Geometric Topology Conference, September 18-25, 2022

4. ICERM, Braids in Low-Dimensional Topology, Apr 25-29, 2022
5. Summer Trisectors Workshop, Virtual Workshop: June 1-5, 2021
6. Tech Topology Conference, Georgia Tech, December 4-6, 2020.
7. Topology Postdocs Workshop, Georgia Tech, July 27-28, 2020
8. Heidelberg Laureates Forum, Heidelberg, September 22-27. 2019
9. Workshop on 4-manifolds, MPIM, Bonn, September 16-20, 2019
10. Perspectives on Dehn Surgery, ICERM, July 15-19, 2019
11. SMS 2019: Current Trends in Symplectic Topology, Centre de Recherches Mathématiques, Montréal, Canada, July 1-13, 2019
12. Topology Workshop LIGAT CRM RP 2019, Spain, June 17-20, 2019
13. Midwest Topology Seminar, MSU, May 18-19, 2019
14. Virginia Topology Conference, UVA, December 12-14, 2018.
15. Tech Topology Conference, Georgia Tech, December 7-9, 2018.
16. Knotted surfaces in 4-manifolds, UMASS Amherst, October 26-28, 2018
17. Topology in Dimensions 3, 3.5 and 4, UC Berkeley, June 25-29, 2018
18. 57th Georgia Topology Conference, UGA, June 6-10,2018
19. Workshop on Symplectic four-manifolds through branched coverings, AIM, May 14-18, 2018
20. UCLA Topology workshop 2018, UCLA, January 3-5, 2018
21. Tech Topology Conference, Georgia Institute of Technology, Atlanta, GA, December 8-10, 2017
22. 58th Texas Geometry & Topology Conference, University of Texas at Austin, Austin TX, November 17-19, 2017
23. Yamabe Memorial Symposium, Symplectic Geometry and Complex Geometry, University of Minnesota, Minneapolis, September 30-October 2, 2016
24. Topological and Quantitative Aspects of Symplectic Manifolds, A Conference in Honor of Dusa McDuff's 70th Birthday, Columbia University and Barnard College, New York, March 17-20, 2016.
25. 14th Graduate Student Topology and Geometry Conference at Indiana University, Bloomington, Indiana, April 2-3, 2016.

TEACHING EXPERIENCE

UGA-Limited Term Lecturer
Athens/GA
2023-present

- Math 2260-Calculus II for Science and Engineering-Spring 25
- Math 2200-Analytic Geometry and Calculus-Spring 25
- Math 4200&6200- Point Set Topology-Fall 24
- Math 2250-Calculus 1-Fall 24
- Math 2250-Calculus 1-Spring 24
- Math 1113-PreCalculus-Fall 23

Georgia Tech-Visiting Research Scholar
Atlanta/GA
2022-2023

- Analysis-Summer Edge Program

Koc University-Visiting Assistant Professor
Istanbul/Turkey
2021-2022

- MATH 101, Finite Math
- MATH 102, Calculus
- MATH 107, Introduction to Linear Algebra

Virginia Polytechnic Institute and State Uni.-Visiting Assistant Professor
Virginia/USA
2019-2021

- MATH 2204, Multivariable Calculus
- MATH 2114, Introduction to Linear Algebra

University of California, Riverside-Visiting Assistant Professor
California/USA
2017-2019

- MATH 145B, Introduction to Topology, Spring 2019
- MATH 9A, First-Year Calculus I, Spring 2019
- MATH 140, Polynomials and Number Systems, Winter 2019
- MATH 9C, Calculus of Several Variables III, Winter 2019
- MATH 120, Optimization Techniques, Fall 2018
- MATH 10B, Calculus of Several Variables II, Fall 2018
- MATH 195, Undergrad Reading Research Course, Spring 2018
- MATH 145B, Introduction to Topology, Spring 2018
- MATH 9B, First-Year Calculus II, Spring 2018
- MATH 6A, Introduction to College Mathematics for the Sciences, Winter 2018
- MATH 9B, First-Year Calculus II, Winter 2018
- MATH 9A, Firs-Year Calculus I, in Fall 2017

University of Minnesota
Minnesota/USA
2011-2017

Instructor
- MATH 2243, Linear Algebra and Differential Equations, in Summer 2016
- MATH 2243, Linear Algebra and Differential Equations, in Summer 2015
- MATH 1271, Calculus I, in Summer 2013

Teaching Assistant

- MATH 2374, CSE Multivariable Calculus and Vector Analysis, in Spring 2017
- MATH 2373, CSE Linear Algebra and Differential Equations, in Fall 2016
- MATH 1031, College Algebra and Probability, in Spring 2016
- MATH 2373, CSE Linear Algebra and Differential Equations, in Fall 2015
- MATH 2373, CSE Linear Algebra and Differential Equations, in Spring 2015
- MATH 2373, CSE Linear Algebra and Differential Equations, in Fall 2014
- MATH 2374, CSE Multivariable Calculus and Vector Analysis, in Fall 2013
- MATH 1372, CSE Calculus II, in Spring 2013
- MATH 1372, CSE Calculus II, in Fall 2012

Middle East Technical University   **Ankara/TURKEY**
Teaching Assistant   *2007–2011*
- Math 120-Calculus of Functions of Several Variables
- Math 119-Calculus with Analytic Geometry
- Math 153-Calculus for Mathematics Students I