

JAROSLAW JARACZ

Curriculum Vitae

MCS 462
Texas State University
601 University Drive
San Marcos, TX 78666
(646)355-5892
jsj74@txstate.edu

- Position** Mathematics Lecturer at Texas State University, 2019-Present
- Education** PhD, Mathematics, Stony Brook University, 2013-2019
 Dissertation: *The charged Penrose inequality for manifolds with cylindrical ends and related inequalities.*
 Advisor: Marcus A. Khuri
 BA, Mathematics/Biochemistry, New York University, 2009-2013
 GPA: 3.874 Magna Cum Laude
- Awards and Honors** 2013 Perley Lenwood Thorne Medal in Mathematics
 Member of Phi Beta Kappa
- Publications** J. Jaracz and M. Khuri, *Bekenstein bounds, Penrose inequalities, and black hole formation*, Phys. Rev. D, 97 (2018), 124026. arXiv:1802.04438.
 J. Jaracz, *The Penrose inequality and positive mass theorem with charge for manifolds with asymptotically cylindrical ends*, Ann. Henri Poincaré, 21 2581–2609 (2020).
<https://doi.org/10.1007/s00023-020-00927-z>
- Teaching** Fall 2020: **INSTRUCTOR** MATH 2471-Calculus 1 (2 sections), MATH 3323-Differential Equations (2 sections)
 Spring 2020: **INSTRUCTOR** MATH 1319-Math for Business and Economics I (2 sections), MATH 1329-Math for Business and Economics II (2 sections)
 Fall 2019: **INSTRUCTOR** MATH 1319-Math for Business and Economics I (2 sections), MATH 1329-Math for Business and Economics II (2 sections)
 Spring 2019: **TA** MAT 303-Calculus IV (ODE) (2 sections)
 Fall 2018: **TA** MAT 125-Calculus A
 Spring 2018: **TA** MAT 126-Calculus B (2 sections)

Fall 2017: **TA** MAT 303-Calculus IV (ODE) (2 sections)

Spring 2017: **TA** MAT 203-Calculus III

Fall 2016: **TA** MAT 131-Calculus I/ **Grader** MAT 342-Applied Real Analysis

Spring 2016: **TA** MAT 126-Calculus B (2 sections)

Fall 2015: **Grader** MAT 310-Linear Algebra

Spring 2015: **TA** MAT 132-Calculus II (2 sections)

Fall 2014: **TA** MAT 125-Calculus A (2 sections)

Spring 2014: **TA** MAT 125-Calculus A (2 sections)

Fall 2013: **TA** MAT 125-Calculus A/ MAT 126-Calculus B

Activities

Various talks at graduate student seminars

Participated in the Simons Center for Geometry and Physics Spring School on Geometric Aspects of General Relativity March 22 - 25, 2018

Participated in the Simons Center for Geometry and Physics Mass in General Relativity Conference: March 26 - 30, 2018

2013-2019: Stony Brook University Math Learning Center Tutor

Misc.

2010 NYU Summer Research Program, *Cooling Rate and pH Dependence of Domain Formation in Giant Unilamellar Vesicles.*

2012 NYU Summer Research Program, *On the usage of PANI Electrodes for the monitoring of the DNA Polymerase reaction with potential application to sequencing and clinical diagnostics.*

Member of Weck Organic Chemistry Research Group at NYU 2011-2013

Native speaker of English and Polish with basic communication skills in French

Familiarity with the Python programming language