Susan M. Abernathy-Taylor

Department of Mathematics
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Education

2009-2014	Louisiana State University, Ph.D. in Mathematics
2007-2009	Louisiana State University, M.S. in Mathematics
2003-2007	Trinity University, B.A. in Mathematics

Professional Experience

2014-present	**Angelo State University**, Assistant Professor
2007-2014	**Louisiana State University**, Graduate Assistant

Publications

1. *The even and odd Kauffman bracket ideals for genus-1 tangles.* Joint with Patrick M. Gilmer. New York J. Math. **22** (2016), 1039-1053.
2. *The Kauffman bracket ideal for genus-1 tangles.* J. Knot Theory Ramifications. **24** (2015), no. 2.
3. *A reduced set of moves on one-vertex ribbon graphs coming from links.* Joint with C. Armond, M. Cohen, O. Dasbach, H. Manuel, C. Penn, H. Russell, and N. Stoltzfus. Proc. Amer. Math. Soc. **142** (2014), no. 3, 737-752.
4. *On Krebes's tangle.* Topology Appl. **160** (2013), no. 12, 1379–1383.

Undergraduate Research Supervised

Knot and Tangle Applications (Honors Thesis), Jackson Rebrovich, Angelo State University, 2015-2016. Awarded a year-long Faculty Mentored Research Grant.

Awards and Honors

2016-2017 Nominee for President's Award for Faculty Excellence in Research/Creative Endeavor, ASU

Research Interests

Low-dimensional topology (skein theory, knot theory, tangle embedding, 3-manifolds, and TQFT's)

Invited Talks

March 2018	*Knots and Tangle Embedding*, AWM Annual Lecture Series, Baylor University
Oct. 2015	*How to Color Knots*, Math Majors' Seminar, Trinity University
Sept. 2015	*Even and odd Kauffman bracket ideals for genus-1 tangles*, Geometry and Topology Seminar, UT Dallas

[1] This curriculum vitae was prepared in June 2019 in response to HB 2504, in conformance with THECB Rule 4.227(2).