Susan M. Abernathy-Taylor

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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

2020-present	**Angelo State University**, Associate Professor
2014-2020	**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.

Grants

CO-PI, Texas Higher Education Coordinating Board OER Development Grant, for developing and implementing OER materials (textbook and online homework) for Math 1324.

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)