#### Brief Vita 2023

Philip Yasskin – Associate Professor Department of Mathematics Texas A&M University

#### Education

- Ph.D., Physics, University of Maryland, May 1979
- M.S., Physics, University of Maryland, December 1975
- M.S., Applied Mathematics, University of Pennsylvania, May 1971
- B.A., Mathematics and Physics, University of Pennsylvania, May 1971

# **Research or Scholarly Interests**

General Relativity, Differential Geometry, Applications of Computer Algebra Systems, Technology in STEM Education, Enhancement of K-12 Education, Outreach to K-12 Students and Teachers

# Activities, Awards and Honors

- 1. Founder and Co-Director (with David Manuel) of the TAMU Summer Educational Enrichment in Math (SEE-Math) program (See <a href="http://see-math.math.tamu.edu/">http://see-math.math.tamu.edu/</a>) 2002-2023.
- Co-Founder and Co-Director (with Alex Sprintson, Frank Sottile, Guoliang Yu, Wencai Lui, John Weeks) of the TAMU Math Circle (See <u>http://mathcircle.tamu.edu/</u>) 2011-2023.
- Recipient of the TAMU Sigma Xi 2018 Outstanding Scientific Communicator Award (See <a href="https://sigmaxi.tamu.edu/awards/outstanding-communicator-award/past-outstanding-communicator-awards/2018">https://sigmaxi.tamu.edu/awards/outstanding-communicator-award/past-outstanding-communicator-awards/2018</a>
- Recipient of the Raytheon, MathMovesU, Math Hero Award (See <u>https://raytheon.mediaroom.com/index.php?s=43&item=2645</u> or <u>https://science.tamu.edu/news/2014/09/yasskin-honored-as-2014-raytheon-math-hero/</u>) 2014
- Co-Recipient (with Douglas Meade) of ICTCM Award presented for their program *Maplets for Calculus* for "excellence and innovation in using technology to enhance the teaching and learning of mathematics" at the 20th International Conference on Technology in Collegiate Mathematics (ICTCM) (See <a href="http://en.wikipedia.org/wiki/ICTCM\_Award">http://en.wikipedia.org/wiki/ICTCM\_Award</a>) 2008.
- 6. National Program Director for the Special Interest Group of the Mathematical Association of America on Math Circles for Students and Teachers (SIGMAA on Circles) (See http://sigmaa.maa.org/mcst/) 2011-19, 2020-2021.
- Organized 2 Poster and Activity Sessions at the Annual Joint Mathematics Meetings (See <a href="http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2012.htm">http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2012.htm</a> for Jan 2012. See <a href="http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2013.htm">http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2012.htm</a> for Jan 2012. See <a href="http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2013.htm">http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2012.htm</a> for Jan 2012. See <a href="http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2013.htm">http://sigmaa.maa.org/mcst/PosterActivitySessions/JMM2013.htm</a> for Jan 2013.)
- 8. Faculty Advisor for Math Club, Pi Mu Epsilon Honor Society, 1986-95, 99-2023.
- 9. The Association of Former Students, Distinguished Achievement Award for Teaching in the College of Science 2011.
- 10. Department of Mathematics Outstanding Service Award 1996, 2007.
- 11. Department of Mathematics Outstanding Teaching Award 1999.
- 12. TAMU Academic Innovation Grant for development of the MYMathApps Calculus textbook 2018-2019.
- 13. 2 MAA Dolciani Grants for Math Circle outreach 2014 and 2015.
- 14. NSF-RETTL Grant for AR and AI for Teaching Spatial Transformations 2021.
- 15. 2 NSF-DUE Grants for Curriculum Development 2007 and 2011.

#### **Software Projects**

- MYMathApps Calculus, (list of contributors is at <a href="https://mymathapps.com/mymacalc-sample/Credits.html">https://mymathapps.com/mymacalc-sample/Credits.html</a>),
  - A 3-semester online Calculus text which is fully hyperlinked, is highly interactive and emphasizes 2d and 3D graphics and animations.
  - Free for students at TAMU and Univ. of South Carolina
  - TAMU faculty, staff and students may access the text at <u>https://www.math.tamu.edu/maple/maplets/MYMACalc</u>
  - Others may access a sample of the text at <u>http://www.MYMathApps.com/mymacalc-sample</u>
- TAMU Math Circle Apps (with Carl Van Huyck),
  - A collection of interactive applets for use at online Math Circles, included in MYMathApps Calculus.
  - Accessible for anyone at <u>http://www.MYMathApps.com/mymacalc-sample/MathCircleApps/MContents.html</u>
- Maplets for Calculus, (with Douglas Meade),
  - A collection of 201 Maple applets for tutoring calculus online now included in MYMathApps Calculus.
  - Free for students at TAMU and Univ. of South Carolina
  - TAMU faculty, staff and students may access the text at <u>https://www.math.tamu.edu/maple/maplets/MYMACalc/M4C/MapletsForCalculus.html</u>
  - Others may purchase them at <a href="https://mymathapps.com/">https://mymathapps.com/</a>
  - WebCalc, (with G. Donald Allen and Michael Stecher),
    - $\circ$   $\;$  An online Single Variable Calculus textbook  $\;$
    - $\circ$   $\;$  This is no longer easily accessible but was the inspiration for MYMathApps Calculus.
- VecCalc, (with Arthur Belmonte),
  - Maple package for Vector Calculus
  - May be downloaded at <u>https://calclab.math.tamu.edu/maple/veccalc/</u>

# Students

- Joseph Martinsen, B.A. May 2019, Honors University Scholars Thesis: "Textbook Dependency Web"
- Matthew Weihing, B.A. May 2019, Honors University Scholars Thesis: "Interactive Web-Based Calculus Tutorials"
- Matthew Barry, B.A. May 2014, Honors University Scholars Thesis: "MathLex, A Web-Based Mathematical Entry System", (See <u>http://mathlex.org/</u>)
- Marta Kobiela, M.S. May 2006, Thesis: "An Eighth Grade Curriculum Incorporating Logical Thinking and Active Learning"

# **Invited Speaker**

- Julia Robinson Math Festival, 24 Hour Math Buffet, invited international zoom talk, "Folding Toilet Paper", March 11-12, 2021
- MathPath 2018, 4 summer math courses for middle school students at Lewis and Clark College, July 15 July 22, 2018.
- Open House Education Foundation, summer math course (with Ted Alper) at No. 2 High School of East China Normal University in Shanghai, China, July 2 17, 2017.
- MathPath 2017, 2 summer math courses for middle school students at Mount Holyoke College, June 25 July 1, 2017.
- University of Tennessee at Chattanooga, Math Circle talk for gifted students in grades 7-11, Oct 19-21, 2017.
- University of Tulsa, Math Teachers' Circle, Summer Immersion Program, (with Diana White), June 6-8, 2016.
- University of Texas, Math Teachers' Circle professional development talk, Nov 19, 2015
- Steven F. Austin State University, Math Teachers' Circle professional development talk, Nov 11, 2014.