# Jeremy Case, Ph.D.

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## **EDUCATION**

Ph.D., Mathematics, University of Minnesota, 1995; M.S. 1992

M.A., Mathematics, Miami University, Oxford, Ohio, 1989

B.A., Mathematics (minor English), Taylor University, 1987

**Ph.D. Thesis:** "Analytic continuation and rationality of Euler factors in integral representations of L-functions for classical groups," Advisor: Dr. Paul B. Garrett

## **AWARDS AND HONORS**

Teaching Excellence and Campus Leadership Award, Taylor University, 2014.

Teaching Excellence Award in the School of Natural and Applied Sciences, Taylor University, 2011.

*Project NExT Fellow* (1996-97) Program sponsored by the Mathematical Association of America to provide recent Ph.D.s in mathematics resources in innovative teaching methods.

*Excellence in Teaching Citation* (1993) University of Minnesota Mathematics Departmental award based on faculty evaluations.

## PUBLICATIONS

**Case, Jeremy**. "My Favorite MAA Articles for Teaching Linear Algebra." *Image: The Bulletin of the International Linear Algebra Society,* Issue 54, Spring 2015.

**Case, Jeremy** and Day, Jane (2003); **Jeremy Case** (2012 and 2015) *Instructor's MATLAB Manual* to accompany David C. Lay (2003, 2012, 2015) *Linear Algebra and Its Applications* third, fourth, and fifth editions. Boston: Addison-Wesley.

Bird, Barbara, **Jeremy Case**, Mark Colgan, Carol Sisson, and Tricia Stan. "Collaborating to Improve Student Learning: Faculty Across the Disciplines Create a 'Big Idea' Reflection Assignment." *Learning Communities Journal*, Volume 3, 2011.

# ARTICLES

"*Mathematics without Apologies* by Michael Harris -- A Review" submitted to the Proceedings of the Association of Christians in the Mathematical Sciences meeting, Redeemer University College (June 2015).

"A Response to 'The Role of Mathematics in the Spiritual Development of George MacDonald' by Dr. David Neuhouser," submitted to The Center for the Study of C.S. Lewis and Friends as part of the David Neuhouser lecture series, "George MacDonald on Salvation, Science, and Society" (August 2014).

"PK Mathematicians." Proceedings of the Association of Christians in the Mathematical Sciences meeting, Westmont College (June 2011).

"Can Critical Thinking be Redeemed?" submitted to the Proceedings of the Association of Christians in the Mathematical Sciences meeting, Wheaton College (June 2009).

"Portrayals of Mathematicians in Culture." Proceedings of the Association of Christians in the Mathematical Sciences meeting, Messiah College (June 2007).

Review of *The One True Platonic Heaven: a Scientific Fiction on the Limits of Knowledge* by John L. Casti for the MAA Online book review column (March 2004).

#### **PROFESSIONAL PRESENTATIONS**

"*Mathematics without Apologies* by Michael Harris - A Review." Presented at the Association of Christians in the Mathematical Sciences biannual conference at Redeemer University College, Ancaster, Ontario (May 2015).

"My Favorite MAA Articles for Linear Algebra." The MAA Contributed Paper Session on Innovative and Effective Ways to Teach Linear Algebra, San Antonio (January 2015).

"The problem of transfer: Explicitly teaching critical thinking in a bridge course." Session on the Scholarship of Teaching and Learning. Presented at Joint Mathematical Meetings, Baltimore (January 2014).

"Interactions with the Writing Center." Presented at Joint Mathematical Meetings, San Diego (January 2013).

"An Educational Issues Seminar: Student Development and Faculty Collaboration." Presented at the Association of Christians in Student Development annual conference, Taylor University (June 2012).

"Teaching, Teamwork, and Twins." Teaching Excellence Award in the School of Natural and Applied Science presentation (February 2012).

"A capstone course in January." Presented at Joint Mathematical Meetings, Boston (January 2012).

"Making Connections." Presented at the Pedagogy of Faith in the Science Classroom, Indiana Wesleyan University (June 2011).

"Pk Mathematicaisn." Presented at the Association of Christians in the Mathematical Science biannual conference at Westmont College (June 2011).

"Do sustainability problems in mathematics really affect student attitudes?" Presented at Joint Mathematical Meetings, New Orleans (January 2011).

"Reflection Papers on the Big Ideas." Presented at Joint Mathematical Meetings, San Francisco (January 2010).

"The Big Idea: Reflection Papers on the Big Questions of a Course." Presented at 2009 Lilly International Conference on College Teaching, Oxford, Ohio (November 2009). Presented with Mark Colgan, Phil Collins, Carol Sisson, and Patricia Stan.

"Can Critical Thinking Be Redeemed?" Presented at the Association of Christians in the Mathematical Science biannual conference at Wheaton College (June 2009).

"Justice as a Theme for Senior Seminar." Presented at the National Faith, Justice, and Civic Learning Conference at DePaul University (June 2009).

"Portrayals of Mathematicians in Culture." Presented at the Association of Christians in the Mathematical Sciences biannual conference at Messiah College (June 2007).

"Repercussions of Eliminating a Bridge Course." Presented at MAA Contributed Paper Session, on Crossing the Bridge to Higher Mathematics: What Works and Why, at the Joint Mathematical Meetings, San Diego (January 2007).

"Mathematics on Stage." Presented at the Association of Christians in the Mathematical Sciences biannual conference at Huntington College (June 2005).

"What if No One Comes? How we got our majors to attend extracurricular math events." Presented at the Extracurricular Mathematics Session at 2004 Mathfest, Providence, Rhode Island (August 2004).

"An Educational Issues Seminar in the Science Division." Presented at the CCCU Campus Based Faculty Development Workshop, Bethel College, St. Paul, Minnesota (June 2003) and at the Ft. Wayne Teaching Conference (February 2004).

#### GRANTS

Taylor University Provost Grant. Awarded 2015 for undergraduate research in mathematics with students Daniel Crane and Tanner Dye.

Taylor University Teaching and Learning Commons Mini-Grant. Awarded 2015. Mathematical and Financial Engineering.

Taylor University Center for Teaching and Learning Excellence Mini-Grant. Awarded 2014. "The Didascalion of Hugo of Saint Victor."

Taylor University summer grant 2013 for Summer Research Training Program for undergraduate research with students Todd Fenstermacher and Ethan Gegner.

Taylor University Faculty ETC Mini-Grant. Awarded 2012. Explored the integration of presentation software including Beamer, DyKnow, Prezi, and PowerPoint.

"Critical Thinking Workshop." Awarded 2011. A participant in Steve Snyder's CTLE mini-grant to develop critical thinking strategies in a particular course.

Taylor University Summer 2011 grant for Summer Research Training Program for undergraduate research in mathematics with student Jacob Erb.

Taylor University Instructional Technology Workshop Faculty Mini-Grant. Awarded 2010. Explored the use of WolframAlpha as a teaching tool in mathematics courses. Awarded 2008. Developed library materials for Mathematics Seminar and Mathematics Capstone. Awarded 2006. Developed math-specific materials for computer science course.

Taylor University Summer 2005 grant for Undergraduate Research in mathematics with student Amanda Harsy.

Taylor University Instructional Technology Workshop Faculty Mini-Grant. Awarded 2004. Developed materials so that College Geometry students can post their dynamic Geometer's Sketchpad sketches to the web.

## SELECTED SCHOOL PRESENTATIONS

"Busywork versus Meaningful Work: What is the Difference?" (2013).

"Faculty Learning Communities." Faculty Enrichment Luncheon (November 2009), with Mark Colgan, Phil Collins, Carol Sisson, and Patricia Stan.

"Where did Lifelong Learning Go? The Preface to the Core Curriculum Objectives." Presented at Colleagues' College, Taylor University (2014).

"Cross cultural relationships." Presented at Cross Cultural Objectives, Taylor University (2007), with Felicia Case.

"Fractions." Presented at St. Paul Human Services workshop for parents, Marion, Indiana (April 2004).

"Integration of Faith and Learning." Presented at Colleagues' College, Taylor University (August 2003).

"Pattern Design: Interactions between Math and Art." Presented an interdisciplinary workshop with Lon Kaufmann, Taylor University (May 2000).

## **PROFESSIONAL ACTIVITIES**

Mathematical Association of America (MAA), member since 1995, Taylor University liaison (1997 to present), IMAA Distinguished Service Award Committee 2003-2005, IMAA Distinguished Teaching Committee 2008-2011, Vice-Chair of the Indiana section 2005-2006, Chair 2006-2007.

Project NExT consultant (2009-2013). Program sponsored by the Mathematical Association of America to mentor recent Ph.D.s in mathematics.

Editorial board for the Dolciani Mathematical Expositions of the Mathematical Association of America, 2008-2014.

Referee for Mathematics Magazine.

Referee for College Mathematics Journal.

American Mathematical Association (AMS) member.

Association of Christians in the Mathematical Science (ACMS), member, board member 2011present, vice president 2015-present.

National Council of Teachers of Mathematics, member 2007-2008.

#### **TEACHING EXPERIENCE**

#### **Taylor University 1995-present**

- Introductory: Finite Mathematics, Fundamental Calculus, Calculus I, Calculus 2.
- Interdisciplinary: Honors Foundations of Christian Thought, Discussion leader for Foundations of Christian Thought, Natural Science Research Methods, Introduction to Statistics, Senior Seminar, Senior Seminar Honors.
- Advanced: Mathematics Ways of Knowing, Linear Algebra, Transitional Mathematics, Justifications in Mathematics, College Geometry, Modeling with Numerical Analysis, Abstract Algebra, Advanced Abstract Algebra, Discrete Mathematics, Mathematics of Finance, Mathematics Seminar, Mathematics Practicum, Math Capstone.

#### University of Minnesota 1989-1995

- University of Minnesota Talented Youth Mathematics Program (UMTYMP), 1994-1995: Assisted at the Geometry Center for the University of Minnesota Talented Youth Mathematics Program a program created to provide high school students with an accelerated and challenging mathematics environment.
- Honors Multi-variable Calculus, 1993-1994
- Unite, 1992-1993: Video simulcast course offered to industries in the larger metropolitan area.
- Lectured in math for the Oce of Minority and Special Student Aairs, 1990-1991.
- **Resource Teaching Assistant, Institute of Technology, 1993-1994:** Provided teaching examples, led discussion groups, and made teaching suggestions for international teaching assistants.

#### Miami University 1987-1989, Teaching Assistant.

#### SERVICE

Chair of Colleagues College, Taylor University, 2013.

Faculty Moderator, Taylor University, 2012-2014

Fellow for Bedi Center for Teaching and Learning Excellence, Taylor University, 2012-2013.

Associate Dean of General Education, Taylor University 2005-2010.

Academic Council, Taylor University, 2005-2008.

Assessment Council, Taylor University, 2008-2013.

Visiting Scholar Committee, Taylor University, 2007-2009.

Chair of the Curriculum Management Committee, 2004.

Taylor University Mathematics Department Chair, 1999-2002, 2013-present.

Math Club Advisor, 1997-2002.

General Education Task Force, 2010-2014.

Foundational Core Curriculum Committee, 2014-present.

Taylor University Honors Board, 1997-2008.

Science Division Educational Issues Seminar, planning committee, 1997-present.

Organized Teaching Squares at Taylor University, 2007-2009.

Organized and Facilitated Faculty Learning Community, 2009.

MLK planning committee at Taylor University, 2006-2008.

Judge for the Academic Poster Session at Taylor University, 2007, 2010.

Global Expressions, International Student mentorship, 2008-2010.

Board member of the Marion Public Library, 2009-present, Secretary 2011-12, Vice-president 2013-

14, President 2014-present.

Chair of the Faulkner Academy Board, a charter school in Marion, Indiana, 2007-2009. Member,

St. Paul Missionary Baptist Church, 1996-2012.

Vice-President, St. Paul Human Services. A community foundation in Marion, Indiana, 1998-2008.

R.H. Faulkner Academy, charter school in Marion, Indiana, organizing committee and charter board

member.

Tutoring Program. Organizer of weekly tutoring program for Marion school children by Taylor

students in the Honors Program, 1998-2006.