

CURRICULUM VITAE

Christopher Dale Goff

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CURRENT POSITION

- ⊢ (starting fall 2014) Half-time (50%) appointment as Assistant Provost for Diversity
- ⊢ Professor, University of the Pacific, 2015-present
- ⊢ Associate Professor, 2007-2015, & Assistant Professor, 2002-2007

EMPLOYMENT HISTORY

- ⊢ Teaching Postdoctoral Fellow, University of Arizona, 1999-2002
The Teaching Postdoctorate is a unique three-year position stressing scholarly activity pertaining to teaching or mathematics instruction. It provides comprehensive professional training for a position that demands excellence in teaching.

EDUCATION

- ⊢ Ph.D., Mathematics, UCSC, 1999
Dissertation: Isomorphic Fusion Algebras of Twisted Quantum Doubles of Finite Groups
Advisor: Geoffrey Mason
- ⊢ M.A., Mathematics, UCSC, 1995
- ⊢ B.S., Physics, University of Texas, Austin, 1993
- ⊢ B.A., Plan II, UT, 1993
The Plan II Program is a well-respected, highly selective honors program that grants a general Liberal Arts degree. Senior Thesis: An Analysis of Samuel Barber's *Hermit Songs*

AWARDS/HONOR SOCIETIES

- ⊢ Charter Member of Pi Mu Epsilon, California Sigma at Pacific, 2011
- ⊢ Judith Chambers Excellence in Student Life Award, 2010
- ⊢ Eric Dingler LGBTQIA Mentor Award, 2010
- ⊢ Member of Phi Beta Kappa, Alpha of Texas, since Fall 1989

SELECTED COURSES TAUGHT AT PACIFIC

- ⊢ Pacific/Mentor Seminar I (General Education)
- ⊢ Creativity and Knowledge (Honors Program)
- ⊢ Topics in the History of Mathematics
- ⊢ Linear Algebra
- ⊢ Abstract Algebra I and II
- ⊢ Modern Geometries
- ⊢ Introduction to Abstract Mathematics
- ⊢ Calculus I, II, and III, Elements of Calculus, Calculus Companion
- ⊢ several Independent Studies (computer graphics, mathematical physics, representation theory of finite groups, representation theory of Lie algebras, fusion algebras, etc.)

UNIVERSITY, REGIONAL, AND NATIONAL SERVICE

- Program Chair of the Golden Section of the MAA (2013-16)
 - Chair-Elect in 2013, Chair in 2014, Program Chair in 2015 (ends February 2016)
- Dolciani Mathematical Expositions Editorial Board (2012-2015)
- At-Large Member for Inclusion (2015-present), MAA Council on the Profession
- Departmental Liaison to the MAA (since 2008)
- Special Consultant, Mathematics, American Heritage Dictionary, 5th Edition, HMH
- Committees and Boards
 - Chair of Academic Council, 2011-12 (2010-11 Chair-Elect, and 2012-13 as Past Chair)
 - Department Search Committees, 2003, 2005, 2009, 2013
 - Writing in the Disciplines Committee, 2009-2010
 - Mentor (now Pacific Seminar) I Planning Committee, 2005-2007
 - Gender Studies Board, 2002-present
 - Phi Beta Kappa committee (Vice President, 2010-2013, and Chair, Members in Course Subcommittee, 2006-present)

PROFESSIONAL MEMBERSHIPS

- MAA (Mathematical Association of America) member, 1999-present
- AWM (Association for Women in Mathematics) member, 2001-present
- NADOHE (National Organization for Diversity Officers in Higher Education) member, 2015
- PCA (Popular Culture Association), member, 2006
- ASA (American Studies Association) member, 2004

SELECTED GRANT APPLICATIONS

- Principal Investigator, California Math-Science Partnership (\$1.8 million), 2015
 “Math with Added Science, Technology, and Engineering for Relevance” (MASTER) will work with K-8 teachers in Lincoln Unified to provide professional development in summers and throughout the school year. Status: **funded**. The first summer workshop took place July 2015.
- Principal Investigator, National Science Foundation Math and Science Partnership (\$7.6 million), 2012
 “Making Algebra Elementary” proposed to work with grade 3-6 teachers in Lincoln and Stockton school districts to improve teacher pedagogy surrounding the Common Core Mathematical Practice Standards. Status: **not funded, but made it to the final round**.
- Regional Undergraduate Math Conferences grant, via MAA and NSF (\$1900), 2011
 This grant provided student travel funds and food for the Northern California Undergraduate Mathematics Conference, held at Pacific on 16 April 2011. Status: **funded**.
- Principal Investigator, US Department of Education Mathematics and Science Education Grant (\$2.2 million), 2010
 “Math Camp: A New Paradigm for Intervention” proposed studying the effectiveness of the Math Camp intervention model in grades 5-6 for the learning of fractions, ratios and proportions. Status: **not funded**.
- Principal Investigator, National Science Foundation Math and Science Partnership (\$11.8 million), 2009
 “Access to Algebra and Beyond through Camp, Coaching, and Collaboration – ABCs” proposes to increase K-Algebra I student achievement in, access to, and preparation for advanced mathematics courses over a five year period through a combination of professional development activities for teachers and new intervention strategies for students. Status: **not funded**.

- Principal Investigator, US Department of Education Mathematics and Science Education Grant (\$1.9 million), 2009
 “Math Camp: A New Paradigm for Intervention” proposes studying the effectiveness of the Math Camp intervention model in grades 4-6 for the learning of fractions. Status: **not funded**.
- UOP Eberhardt Summer Research Fellowship (\$3500), Summer 2013, 2008 and 2003
- UOP Eberhardt Priorities Grant (\$3500), Fall 2007
 G. Gerhard (History/Gender Studies) and I co-authored this grant to support Pacific’s March 2008 Gender and Science Conference, hosted by Gender Studies.

SELECTED PUBLICATIONS

Peer-reviewed

- Animating popular mathematics: a review of “The Simpsons and their Mathematical Secrets” by Simon Singh. *AMS Notices*, January 2015.
- How to Improve a Math History Assignment, *Loci: Convergence* (July 2014) – Available online at: <http://www.maa.org/publications/periodicals/convergence/how-to-improve-a-math-history-assignment>.
- English translation (from Latin) of “On finding three or more numbers, the sum of which is a square, while the sum of the squares is a fourth power,” by L. Euler. Originally published (posth.) in *Mémoires de l’académie des sciences de St.-Petersbourg* 9, 1824, pp. 3-13. E763 in the Eneström index. Translation available online at the Euler Archive, April 2014.
- English translation (from Latin) of “On a notable advancement of Diophantine analysis,” by L. Euler. Originally published (posth.) in *Mémoires de l’académie des sciences de St.-Petersbourg* 11, 1830, pp. 1-11. E772 in the Eneström index. Translation available online at the Euler Archive, May 2014.
- Fusion rules for abelian extensions of Hopf algebras, *Algebra and Number Theory* 6 (2), 2012, pp. 327-339.
- Mathematics and Television. Edwards, Leigh H., Goff, Christopher D., Greenwald, Sarah J., and Thomley, Jill E. (2011). In Sarah J. Greenwald & Jill E. Thomley (Eds.) *Encyclopedia of Mathematics and Society*. USA: Salem Press.
- Recursive Functions. Goff, Christopher D. (2011). In Sarah J. Greenwald & Jill E. Thomley (Eds.) *Encyclopedia of Mathematics and Society*. USA: Salem Press.
- Generalized twisted quantum doubles and the McKay correspondence, with Geoff Mason, *Journal of Algebra*, 324 (11), Dec 1, 2010, pp. 3007-3016
- Fusion algebras for vertex operator algebras and finite groups, *Vertex Operator Algebras and Related Areas, AMS Contemporary Mathematics* 497, 2009, pp. 79-83.
- On the gauge equivalence of twisted quantum doubles of elementary abelian and extra-special 2-groups, with G. Mason and S.-H. Ng, *J. Alg.* 312 (2), 2007, pp. 849-875.
- Contributing Faculty Member, *Pacific Seminar I: What is a Good Society?*, Fall 2006 and 2007.
- Co-editor, special issue of *PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies)* devoted to Mathematics and Popular Culture, 17 (1), April 2007.
- To Boldly Go: Current Work and Future Directions in Mathematics and Popular Culture, with Sarah J. Greenwald, *PRIMUS*, 17 (1), April 2007, pp. 1-7.
- An explicit fusion algebra isomorphism for twisted quantum doubles of finite groups, *J. Alg.* 283, 2005, pp. 738-751.
- A family of isomorphic fusion algebras of twisted quantum doubles of finite groups, *J. Alg.* 259, 2003, pp. 494-511.
- Benefits of a Comprehensive Undergraduate Teaching Assistant Program, with B. Lahme, *PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies)*, v. XIII #1, March 2003, pp. 75-84.
- Using Composition Techniques to Improve Classroom Instruction and Students’ Understanding of Proof, *PRIMUS*, v. XII #6, September 2002, pp. 239-246.

Self-published

- Common Core State Standards for High School Math: Algebra. What Every Math Teacher Should Know. Createspace.com, 2013.
- Common Core State Standards for High School Math: Geometry. What Every Math Teacher Should Know. Createspace.com, 2013.
- CSET Mathematics Study Guide I: Algebra and Number Theory. Createspace.com.
- CSET Mathematics Study Guide II: Geometry; Probability and Statistics. Createspace.com.
- CSET Mathematics Study Guide III: Calculus and History of Mathematics. Createspace.com.

SELECTED PRESENTATIONS

- Alan Turing: The Man Behind the Machine
 - Math Club and PRIDE Alliance, Spring 2015
 - Introduction to Gender Studies, Fall 2015
 - Engineering Ethics, Spring 2016
- Fusion Algebras & Accidental Trigonometry
 - Sacramento State University Math Colloquium, November 2015
 - Santa Clara University Mathematics Colloquium, November 2009
- Diophantine Geometry, Eulerian Number Theory, and Undergraduates
 - (invited) California Mathematics Council Community Colleges, Lake Tahoe, April 2015
 - (invited) Sacramento Valley Community College Math Conference, Sac City College, March 2013
 - MAA session on history of geometry and its uses in the classroom, San Diego, CA, January 2013
- Dynkin Diagrams and Fusion Algebras
 - (invited) University of Southern California Algebra Colloquium, Los Angeles, November 2013
- An isomorphism between the fusion algebras of V_{t^+} and type $D_{(n)}$ level 2
 - AMS CP Session, Joint Meetings, Washington, DC, January 2009
- (keynote) Does Spelling Count? Reflections on Writing in the Mathematics Classroom
 - Sacramento Valley Community College Mathematics Conference, March 2007
- Selected talks and panels relating Mathematics and Popular Culture
 - The Usual Suspects?, State of the Arts Humanities Event, Pacific, May 2008
 - A Conversation with Mathematical Hollywood Writers and Mathematics Faculty, (moderator) MAA Panel, Joint Meetings, San Diego, CA, 2008
 - Movie Math: Mathematical Talent = Mental Illness, MAA CP Session, co-organizer and presenter, Mathematics and Popular Culture, Mathfest, Knoxville, TN, August 2006
 - Mathematics and Popular Culture (with Sarah J. Greenwald), MAA CP Session co-organizer and presenter, Joint Meetings, San Antonio, TX, January 2006
 - A Beautiful Mind, PCA/ACA Panel, Atlanta, GA, April 2006
 - Mathematicians in the Movies, ASA Panel, Atlanta, GA, November, 2004
- Is Science Sexy? – a Panel on Gender and Science
 - Co-organizer (with E. Sparks) and Moderator, November 2003
- Cultural Authority and New Interdisciplinarity, Ethnomathematics
 - Panelist, American Studies Association conference, Washington, DC, November 2001

PROFESSIONAL CONSULTING

- Houghton Mifflin Company
 - Technical consulting for mathematical definitions and artwork, American Heritage Dictionary

PERSONAL INTERESTS

- Baritone with Sacramento Master Singers (Joined in 2005)
- Yoga