## **Professional Presentations by**

## Dr. Cynthia J. Huffman

- 355. Pre-Columbian Peru and Knotty Numbers, Pittsburg Rotary Club, February 11, 2025
- 354. *Knotty Numbers*, MOKAN National Council of Teachers of Mathematics, Pittsburg, KS, February 3, 2025
- 353. The Incan Empire and Knotty Math, PSU Mathematics Colloquium, December 5, 2024
- 352. What's My Price? The Math Behind Barcodes, PSU Mathematics Honor Day, October 3, 2024
- 351. *Rare Math Books in the Herzog August Bibliothek*, PSU Mathematics Colloquium, September 12, 2024
- 350. Mathematics in the Trivium and Quadrivium in the Middle Ages and Back Again, invited Benedictine College Department of Mathematics and Computer Science Colloquium, Atchison, KS, September 9, 2024
- 349. *Using Linear Algebra in Archaeology*, joint with Ximena Catepillán, invited session "When are we going to use this?": Interdisciplinary Projects in Pure Math Courses, MathFest, Indianapolis, IN, August 9, 2024
- 348. *Deer, Death, Destructive Flames, and Determination*, by invitation in the session "Please Pay Attention to the Person Behind the Curtain," MathFest, Indianapolis, IN, August 9, 2024
- 347. *Influential Books in the Development of Arithmetic and Algebra*, Ramus International Symposium 2024, Herzog August Bibliothek, Wolfenbüttel, Germany, June 19, 2024
- 346. Can You Do Math Like an Egyptian?, KME Regional Convention, April 20, 2024
- 345. Chateaux and Mathematics in the Loire Valley, Pittsburg Sunrise Kiwanis, April 9, 2024
- 344. Ellipses on Easter Island, KSMAA, Washburn University, Topeka, KS, March 23, 2024
- 343. Following Mathematical Footprints through the Loire Valley in France, PSU Mathematics Colloquium, March 21, 2024
- 342. *Bell-y Mathematics: Math & Music Intertwined*, invited Zoom presentation sponsored by The Panamanian Foundation for the Promotion of Mathematics (FUNDAPROMAT) and the Mathematical Association of America (MAA) with attendees from Europe, North America, and South America, December 13, 2023
- 341. *Original Sources to Enhance Student Engagement in Math Classes*, PSU Sabbatical Showcase, video presentation due to family emergency, November 7, 2023
- 340. Math Like an Egyptian, 2 times, PSU Mathematics Honor Day, October 5, 2023

- 339. Cambodia: Numbers, Geometry, and Zenith Passage, PSU Mathematics Colloquium, September 28, 2023
- 338. Symmetry in the Artwork of Early Indigenous North American Cultures, MAA Contributed Paper Session on Ethnomathematics: Culture meets mathematics in the classroom, MathFest, Tampa, FL, August 4, 2023
- 337. *Ireland's First Public Library A 300 Year Step Back in Time*, Pittsburg Sunrise Kiwanis, June 13, 2023
- 336. *Ethnomathematics: The Intersection of Culture, History, and Mathematics*, joint with Ximena Catepillán, The Canadian Society for History and Philosophy of Mathematics, Toronto, Canada, May 29, 2023
- 335. Volumes of Math Books in an Archbishop's Library, PSU Mathematics Colloquium, April 25, 2023
- 334. Rare Mathematical Books in Dublin, KSMAA, Lindsborg, KS, April 15, 2023
- 333. A Passionate Mathematician (Émilie du Châtelet), Joplin Kiwanis, October 18, 2022
- 332. *Matrix Multiplication and Computer Generated Imagery*, 2 times, PSU Mathematics Honor Day, October 6, 2022
- 331. *A Mathematical Look at Ancient North American Pyramids*, PSU Mathematics Colloquium, September 8, 2022
- 330. *Harmonize Keynote Presentation*, invited to co-present with Alicia Villareal, Mark Diacopoulos, and Susan Dellasega, 12<sup>th</sup> Annual PSU Professional Development Day, August 17, 2022
- 329. *Cultivate Engagement Using Harmonize*, with Mark Diacopoulos, Jennifer Harris, Michelle Hudiburg, and Jennifer Pursley, 12<sup>th</sup> Annual PSU Professional Development Day, August 17, 2022 (two times)
- 328. *Mathematical and Philosophical Imagery in Original Sources Related to Èmilie du Châtelet*, The Canadian Society for History and Philosophy of Mathematics, virtual, May 13, 2022
- 327. An Ancient Egyptian Mathematical Photo Album Hieroglyph Numerals and More, KSMAA, Atchison, KS, April 9, 2022
- 326. Pythagoras, a U.S. President, and Origami, PSU Mathematics Colloquium, March 24, 2022
- 325. *Ringing Math* (invited), South-Central KME Regional Convention, virtual, March 5, 2022 <a href="https://www.youtube.com/watch?v=RKeZIvXErEM">https://www.youtube.com/watch?v=RKeZIvXErEM</a>
- 324. *Cosets in the Belfry*, invited virtual presentation, HOM SIGMAA Virtual Speaker Series, December 1, 2021
- 323. CGI and Matrix Multiplication, 2 times, PSU Mathematics Honor Day, October 7, 2021
- 322. Egyptian Numerals: Up Close and Personal, PSU Mathematics Colloquium (virtual), August 24, 2021

- 321. *Organizing a Virtual Career Panel*, with Ananda Jayawardhana, PSU Professional Development Day, August 11, 2021
- 320. *Mathematical Mysteries of Rapa Nui with Classroom Activities* (based on joint work with Ximena Catepillan and Scott Thuong), accepted in Themed Contributed Paper Session on Ethnomathematics: Culture meets mathematics in the classroom, MathFest (virtual), August 5, 2021
- 319. *Agnesi vs. Colson: Did Place Matter?*, virtual, 5-yearly joint conference of the British Society for the History of Mathematics and Canadian Society for History and Philosophy of Mathematics (virtual), St. Andrews, Scotland, July 2021 (originally accepted for presentation in July 2020 but postponed due to COVID-19 Pandemic)
- 318. *Emilie du Chatelet and Original Sources at the Linda Hall Library*, invited presentation for the Linda Hall Library President's Circle, April 14, 2021
- 317. *Maria Agnesi with the Preacher, the Witch, and Calculus*, PSU Mathematics Colloquium (virtual), April 13, 2021
- 316. *Calculus Notation: Agnesi vs. Colson*, KSMAA, virtual, March 27, 2021 (originally submitted for 2020 KSMAA meeting which was cancelled due to the pandemic)
- 315. *Non-Traditional Assessments Digital Storytelling*, virtual, PSU Center for Teaching, Learning, and Technology panel session, November 12, 2020
- 314. *Using Student Video Assignments to Encourage Higher Level Thinking*, virtual, PSU Professional Development Day, August 12, 2020
- 313. *Ludolph Van Ceulen: A Piece of the Pi Story*, PSU Mathematics Colloquium, February 4, 2020
- 312. A Brief History of the Mathematics Honor Society Kappa Mu Epsilon, Joint Mathematics Meetings, Baltimore, MD, January 17, 2020
- 311. A Real World Example of Solving a Quadratic Equation in Movie CGI, PSU Community College Math Conference, November 16, 2019
- 310. CGI Matrices, 2 times, PSU Mathematics Honor Day, October 17, 2019
- 309. *Intro to Cryptology for the WWII Code Girls*, PSU American History class, October 15, 2019
- 308. *Algebra in Special Visual Effects in Movies and Video Games*, Kansas City Mathematics Teaching Technology EXPO, October 4, 2019
- 307. Easter Island: Moais and Mysteries, Sunflower Kiwanis, Pittsburg, KS, September 10, 2019
- 306. Easter Island: Moais, Mapping, and Math, PSU Mathematics Colloquium, August 29, 2019
- 305. *Easter Island: Island of Mystery*, Crusaders class, First United Methodist Church, Pittsburg, KS, August 25, 2019

- 304. Lessons Learned from Creating a Course for Canvas Commons, PSU Professional Development Day, August 14, 2019
- 303. Matrices and CGI, Pittsburg (KS) High School, Algebra 2 class, April 23, 2019
- 302. *Maya Geometry: Verification of a Right Angle*, 2 times, joint with John C. D. Diamantopoulos (Northeastern State University), KME National Convention, April 12, 2019
- 301. Euler's "Memorabile" Induction Fallacy Example, KSMAA, Pittsburg, KS, March 30, 2019
- 300. *Lagrange and the Development of Abstract Algebra*, PSU Mathematics Colloquium, February 26, 2019
- 299. Maya Mathematics in a Geometry Classroom, Joint Mathematics Meetings, Baltimore, MD, January 18, 2019
- 298. Émilie du Châtelet A Passionate Mathematician, Pittsburg PechaKucha Night, November 14, 2018
- 297. Euler and a Remarkable Example of an Induction Fallacy, PSU Mathematics Colloquium, November 6, 2018
- 296. Math Like an Egyptian, 3 times, PSU Mathematics Honor Day, October 18, 2018
- 295. Teaching a Course on Mathematics in Computer Graphics using Ray-Tracing Software, 28th Annual Kansas City Regional Mathematics Technology Expo, October 5, 2018
- 294. An Ur-Mazing Game, PSU KME meeting, September 19, 2018
- 293. *Encore presentation: Creating a Course for Canvas Commons*, (requested repeat of PD Day presentation, with updates), PSU Center for Teaching, Learning, and Technology, September 17, 2018
- 292. Searching for Ancient Mathematics in Britain, PSU Mathematics Colloquium, August 28, 2018
- 291. Creating a Course for Canvas Commons, PSU Professional Development Day, August 15, 2018
- 290. Movie Magic in Calculus & Pre-Calc Classes, KSMAA, Overland Park, KS, April 21, 2018
- 289. A Mathematical Treasure Trove in our Own Backyard, invited Keynote Address, Kappa Mu Epsilon (Mathematics Honor Society) North Central/South Central Regional Convention, Emporia, KS, April 14, 2018
- 288. *iPads and Digital Storytelling in History of Math*, PSU Center for Teaching, Learning, and Technology, March 30, 2018
- 287. *Mathematical Passion A Look at Emilie du Chatelet*, invited presentation, Nerd Nite, Lawrence, KS, March 14, 2018
- 286. Mathematics of Movie Magic, PSU Mathematics Colloquium, February 13, 2018

- 285. Using Activities based on Original Sources in a General Education Mathematics Course, Joint Mathematics Meetings, San Diego, CA, January 12, 2018
- 284. *Leonardo Pisano: A Mathematician Who Rocked the Western World*, PSU Mathematics Colloquium, September 21, 2017
- 283. *Up Close and Personal with Ancient Greek Mathematics*, PSU Mathematics Colloquium, August 31, 2017
- 282. Archaeology, Science, & Mathematics in Ancient Greece, Sunflower Kiwanis, Pittsburg, KS, August 8, 2017
- 281. Rare Mathematics Books at the Linda Hall Library, KSMAA, Lawrence, KS, April 29, 2017
- 280. *Mathematics and Handbells*, Inspired by Math program for middle school students, Emporia State University, April 28, 2017
- 279. *iPads in a History of Mathematics Class*, PSU Center for Teaching, Learning, and Technology, April 10, 2017
- 278. *Bell-y Math: Connections between Mathematics and Change Ringing*, Kappa Mu Epsilon, 41<sup>st</sup> Biennial National Convention, Evangel University, Springfield, MO, April 7, 2017
- 277. Girolamo Cardano: Physician, Astrologer, Gambler, Mathematician, and More, PSU Mathematics Colloquium, March 30, 2017
- 276. *Puzzling and Perplexing Paper Tricks*, Enhancing Your Future with Mathematics and Science conference for middle school girls, Emporia State University, March 4, 2017
- 275. *Mathematics Professor: A Number One Career*, Enhancing Your Future with Mathematics and Science conference for middle school girls, Emporia State University, March 4, 2017
- 274. *Digital Storytelling in a History of Mathematics Class*, Joint Mathematics Meeting, Atlanta, GA, January 4, 2017
- 273. *iPads with Pre-Service Mathematics Teachers*, PSU Center for Teaching, Learning, and Technology, November 30, 2016
- 272. Digital Storytelling in the Mathematics Classroom with the Adobe Spark App, 26th Annual Kansas City Regional Mathematics Technology Expo, October 7, 2016
- 271. Angry Birds Math, 3 times, PSU Mathematics Honor Day, October 6, 2016
- 270. *Mathematical Passions: A Look at Two 18<sup>th</sup> Century Female Mathematicians*, PSU Mathematics Colloquium, September 13, 2016
- 269. Digital Storytelling in the University Classroom, PSU Professional Development Day, August 17, 2016
- 268. *Digital Storytelling in the Classroom*, 20<sup>th</sup> Annual Technology and the Classroom Conference, PSU Educational Technology program, June 3, 2016
- 267. The Cubic Controversy, the 13th Pittsburg PechaKucha Night, May 4, 2016

- 266. Influential Books in the History of Math, PSU Sabbatical Showcase, March 4, 2016
- 265. Original Sources for Teaching Mathematics, PSU Mathematics Colloquium, February 23, 2016
- 264. The Great Art: Cardano's "Ars Magna" in College Algebra and Precalculus, Joint Mathematics Meeting, Seattle, WA, January 9, 2016
- 263. *Math Treasures in Kansas City*, MOKAN National Council of Teachers of Mathematics, Pittsburg, KS, December 8, 2015
- 262. *Mathematical Masterpieces*, Oklahoma Alpha KME meeting, Tahlequah, OK, December 2, 2015
- 261. *Geogebra Applets for Ancient Indian Rope Geometry*, PSU Mathematics Colloquium, joint with Dr. Scott Thuong, October 22, 2015
- 260. *Mathematical Treasures at the Linda Hall Library*, Kansas Alpha chapter of KME, October 20, 2015
- 259. Standing on the Shoulders of Giants to Bring out the Math Geek in Students, Kansas Association of Teachers of Mathematics, Maize, KS, October 16, 2015
- 258. Angry Birds Algebra, PSU Mathematics Honor Day, October 15, 2015
- 257. Influential Books in the Development of Arithmetic and Algebra in the 15<sup>th</sup> and 16<sup>th</sup> Centuries, Linda Hall Library, October 7, 2015 (video available at <a href="https://vimeo.com/142256343">https://vimeo.com/142256343</a> and http://www.lindahall.org/videos/)
- 256. *Symmetry, Frieze Groups, Wallpaper Groups, and iPads*, 25<sup>th</sup> Annual Kansas City Regional Mathematics Technology Expo, October 2, 2015
- 255. *A Sampling of Ways Mathematics Helps People*, the 12<sup>th</sup> Pittsburg PechaKucha Night, September 15, 2015
- 254. *PechaKucha! Short Efficient Student Research Presentations*, PSU Professional Development Day, August 12, 2015
- 253. *Developing a High Quality Online Course*, joint with Dr. Mark Johnson, Ms. Liz Mascher, and Dr. Julie Samuels, PSU Professional Development Day, August 12, 2015
- 252. Rope Geometry of Ancient India in the Classroom, MathFest, Washington, D.C., August 5, 2015
- 251. 20+ Timesavers for Teachers using Google, 19<sup>th</sup> Annual Technology and the Classroom Conference, PSU Educational Technology program, May 29, 2015
- 250. *iPads in Applied Algebra*, PSU Center for Teaching, Learning, and Technology, April 28, 2015
- 249. Wallpaper Borders, Dancing, and Math, Sunflower Kiwanis, Pittsburg, KS, April 21, 2015
- 248. Archimedes' Secrets Revealed, KSMAA, Fort Scott, KS, March 28, 2015

- 247. Mathematical Rhythms, the 11th Pittsburg PechaKucha Night, March 24, 2015
- 246. KenKen Puzzles, Kansas Alpha chapter of KME, March 10, 2015
- 245. Maya Mysteries Revealed and Hands-on Maya Geometry, Enhancing Your Future with Mathematics and Science conference for middle school girls, Emporia State University, March 7, 2015
- 244. *Using iPads in Applied Abstract Algebra*, Joint Mathematics Meeting, San Antonio, TX, January 10, 2015
- 243. *Using iPads in a Mathematical Software Course*, PSU Center for Teaching, Learning, and Technology, December 4, 2014
- 242. Secrets of a Greek Streaker Revealed by a Byzantine Prayer Book, colloquium, PSU, December 2, 2014
- 241. PSU Gangnam Style, the 10th Pittsburg PechaKucha Night, October 28, 2014
- 240. *Transformational Geometry via Wallpaper Borders and Dance*, Kansas Association of Teachers of Mathematics, Hays, KS, October 13, 2014
- 239. *Pinterest and Five Other Digital Curation Tools for the Classroom*, 18<sup>th</sup> Annual Technology and the Classroom Conference, PSU Educational Technology program, May 30, 2014
- 238. 2012 and Maya Math, Iowa Alpha chapter of KME, Chapter Installation, Central College, Pella, IA, April 30, 2014
- 237. *The Greek Streaker and the Secret of the Prayer Book*, the 9<sup>th</sup> Pittsburg PechaKucha Night, April 25, 2014 (A video based on the talk is published on the PSU Axe Library website at <a href="http://libguides.pittstate.edu/history-of-math">http://libguides.pittstate.edu/history-of-math</a> .)
- 236. Mathematics of the Native Alaskan Tlingit Indians, KSMAA, Emporia, KS, March 29, 2014
- 235. A Report on the 2013 PSU Delegation to Korea, Southeast Crawford County Chapter of the American Association of Retired Persons, March 12, 2014
- 234. *Perspectives on Social Media in Higher Education*, panel discussion, PSU, February 17, 2014
- 233. *Techniques from the Ancients for Verification of Right Angles*, joint with John C. D. Diamantopoulos (Northeastern State University), Joint Mathematics Meeting, Baltimore, MD, January 18, 2014
- 232. Course Redesign Applied to a History of Math Course, Joint Mathematics Meeting, Baltimore, MD, January 16, 2014
- 231. Angry Birds, Parabolas, and iPads, MOKAN National Council of Teachers of Mathematics, December 2, 2013
- 230. PSU in Korea, P.E.O. Chapter CP, Pittsburg, KS, November 12, 2013
- 229. Angry Birds Math, PSU Mathematics Honor Day, October 17, 2013

- 228. Angry Birds Algebra!, Kansas Association of Teachers of Mathematics, Junction City, KS, October 14, 2013
- 227. Alaska Dreamin', (the 8th) Pittsburg PechaKucha v.3.1, September 20, 2013
- 226. Southeastern Alaska through a Mathematical Lens, colloquium, PSU, September 3, 2013
- 225. *PSU's eLearning Academy*, joint with Dr. Mark Johnson and Dr. Brenda Frieden, PSU Professional Development Day, August 14, 2013
- 224. Perusing Perugia, Pittsburg PechaKucha v.7, April 30, 2013
- 223. *Mathematics in Bologna*, KSMAA (joint with three other MAA sections), Maryville, MO, April 20, 2013
- 222. Mathematically Tourin' Turin, the 6th Pittsburg PechaKucha night, March 12, 2013
- 221. *Mathematics and the Existence of God*, MOKAN National Council of Teachers of Mathematics, February 4, 2013
- 220. Geometry and Baroque Architecture in Turin, Italy, originally submitted to the MAA Special Session on The History of Geometry, its Applications, and their Uses in the Classroom, accepted but "upgraded" by invitation to be a longer special presentation at the opening of the annual History of Math Special Interest Group of the MAA (HOMSIGMAA), Joint Mathematics Meeting, San Diego, CA, January 9, 2013
- 219. Bells and Mathematics, Children's Music class, PSU, December 6, 2012
- 218. *Using an iPad for Geometry for Preservice Middle School Teachers*, PSU Center for Teaching, Learning, and Technology, December 5, 2012
- 217. Traipsing through Italy in Mathematical Shoes, colloquium, PSU, November 29, 2012
- 216. SmartBoard Basics for Teaching Mathematics, Teaching of Mathematics Seminar class, November 7, 2012
- 215. *Hands-on Mayan Geometry*, Kansas Association of Teachers of Mathematics, PSU, October 26, 2012
- 214. *Mayan Time Keepers and 2012*, Kansas Association of Teachers of Mathematics, PSU, October 26, 2012
- 213. *Teaching Geometry with an iPad*, Kansas City Regional Mathematics Technology EXPO, October 6, 2012
- 212. *Teaching Mathematics Using a SmartBoard*, Techniques for Teaching Mathematics class, PSU, September 25, 2012
- 211. Hiatus in Haiti, the 5<sup>th</sup> Pittsburg PechaKucha night, September 15, 2012
- 210. Change Ringing and Mathematics, Power of Music honors class, PSU, September 2012
- 209. Dance the Frieze Groups, Kansas Alpha chapter of KME, September 5, 2012

- 208. Mayan Mysteries Revealed, Pittsburg Noon Kiwanis, July 26, 2012
- 207. Mayan Myths and Maths, Pittsburg Christian Women's Fellowship Club, April 16, 2012
- 206. 2012 and Mayan Mathematics, KSMAA, Kansas State University, April 14, 2012
- 205. Movie Mathematics, Math Club, Pittsburg High School, March 14, 2012
- 204. *Mathematics Professor: A Number One Career*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 10, 2012
- 203. Fibonacci and the Golden Rectangle, fourth Pittsburg PechaKucha Night, February 22, 2012
- 202. *Mayan Geometry in the Classroom*, national Joint Mathematics Meeting, Boston, MA (Out of the over 2700 talks at the conference, one of the few chosen to be featured on the American Mathematical Society's webpage in selected highlights from JMM2012. http://www.ams.org/meetings/national/jmm12-addresses#mayan), January 7, 2012
- 201. 2012 and Mayan Math, Northeastern State University in Tahlequah, OK, December 5, 2011
- 200. PSU in Paraguay, the third Pittsburg PechaKucha night, November 30, 2011
- 199. Mayan Mysteries Revealed, Sunflower Kiwanis, Pittsburg, November 8, 2011
- 198. *Using a SmartBoard in the College Classroom*, PSU Faculty Professional Development Day, October 20, 2011
- 197. Can You Ken Ken?, PSU Mathematics Honor Day, October 13, 2011
- 196. Yes, You KenKen!, Kansas Association of Teachers of Mathematics, Topeka, KS, October 3, 2011
- 195. Apocalypse 2012? What Do Mayan Calendars and Mathematics Tell Us, colloquium, PSU, September 15, 2011
- 194. *Mayan Mysteries Revealed*, Retired School Personnel Association, Pittsburg, September 9, 2011
- 193. *Guatever: An Overview of a Mayan Math Study Trip*, second Pittsburg PechaKucha Night, July 12, 2011
- 192. *Pixar and Mathematics*, Northeastern Oklahoma A&M College Pre-Engineering Club, April 21, 2011
- 191. Geometry, Flatland, and Sliceforms, Countryside Christian School
- 190. Napoleon, Mathematics, and Egyptomania, first Pittsburg PechaKucha Night, April 5, 2011
- 189. Visualizing 3D via 2D, MOKAN NCTM affiliate meeting, April 4, 2011
- 188. Napoleon and Mathematics: A Case Study of the Interplay between Mathematics and History, colloquium, PSU, March 30, 2011
- 187. Fourier Meets the Pharaohs, KSMAA, Baker University, March 5, 2011
- 186. Flatland Meets Spaceland, Kansas Alpha chapter of KME, PSU, February 16, 2011

- 185. Do the KenKen!, MOKAN NCTM affiliate meeting, December 6, 2010
- 184. *Math for Drummers and Poets*, Kansas Association of Teachers of Mathematics, Wichita, KS, October 15, 2010
- 183. Bell-y Math, PSU Mathematics Honor Day, October 7, 2010
- 182. Facebook for Faculty: Best Practices, Groups, Pages, Security, Privacy, and a Whole Lot More, joint with Michelle Hudiburg, Susan Johns Smith, PSU Center for Teaching, Learning, and Technology, September 16, 2010
- 181. Writing Across the Mathematics Curriculum, MAA Project NExT, MathFest, Pittsburgh, PA, August 4, 2010
- 180. BoomWhacker Math, Kauffman Scholars, Inc. College Residential Institute, PSU, June 2010
- 179. A Mathematical Tour of Egypt, KSMAA, Washburn University, March 27, 2010
- 178. A Mathematical History Study Tour of Egypt, PEO Chapter CP, March 9, 2010
- 177. Teaching Math Using a SmartBoard, PSU, March 8, 2010
- 176. *Mathematics Professor: Fun Thinking for a Living*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 6, 2010
- 175. Can You "Ken Ken"?, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 6, 2010
- 174. *Teaching a Course on Women in Mathematics*, Joint Mathematics Meeting, San Francisco, CA, January 16, 2010
- 173. Math Like an Egyptian, Northeastern State University, Tahlequah, OK, November 18, 2009
- 172. A New Math Logic Puzzle (An introduction to KenKen puzzles), Kansas Alpha KME Math Honor Society meeting, November 12, 2009
- 171. Camels, Pyramids, and Mummies, Oh My!, P.E.O. Chapter IO, November 10, 2009
- 170. Visual Egyptian Math, Kansas Alpha KME, October 22, 2009
- 169. Can You Ken Ken?, PSU Mathematics Honor Day, October 2009
- 168. Into the Pyramid, colloquium, PSU, September 22, 2009
- 167. BoomWhacker Math, Kauffman Scholars, Inc. College Residential Institute, PSU, June 2009
- 166. Strengthening Mathematical Skills with Sudoku, Countryside Christian School, March 2009
- 165. Do U Sudoku???, Northeastern State University, Tahlequah, OK, February 25, 2009
- 164. *Math for Drummers and Poets*, MOKAN Area Council of Teachers of Mathematics, February 2, 2009
- 163. *The Local Case Sub-Algorithm for Suslin's Stability Theorem*, AMS Session on Commutative Algebra, Joint Mathematics Meeting, Washington, DC, January 7, 2009

- 162. Stamping Across Mathematical History, Symposium, SMARTT Science and Mathematics conference, Overland Park, KS, November 8, 2008
- 161. *Colorful Patterns in Pascal's Triangle*, SMARTT Science and Mathematics conference, Overland Park, KS, November 7, 2008
- 160. Poetry, Dance Music, and Mathematics, colloquium, PSU, October 21, 2008
- 159. *Mathematical Rhythms: the nature of rhythm and pattern from a mathematical perspective*, lecture at the opening reception for the exhibit "The Art of Rhythm" at the Little Room gallery in Pittsburg, KS, October 11, 2008
- 158. Stamping Through the History of Math, MOKAN affiliate of the National Council of Teachers of Mathematics, October 6, 2008
- 157. Bell-y Math, PSU Mathematics Honor Day, October 2008
- 156. A SMART(board) Way to Do Math, MOKAN Secondary Math Conference, September 23, 2008
- 155. Beyond the Basics or Ways to Get Fancy with the SmartBoard, MOKAN Secondary Math Conference, September 23, 2008
- 154. *Mathematical Family Trees*, Kansas Alpha KME Math Honor Society meeting, September 18, 2008
- 153. *Using the SMART board as an Instructional Tool*, PSU Arts & Sciences Technology Mini-Conference, September 9, 2008
- 152. BoomWhacker Math, Kauffman Scholars, Inc. College Residential Institute, PSU, June 2008
- 151. Handbells and Math, SEK Retired School Personnel, Pittsburg, KS, May 9, 2008
- 150. Symmetries, Group Theory, and Depression Glass, colloquium, PSU, May 6, 2008
- 149. Abstract Algebra in the Dining Room, KSMAA, Bethel College, North Newton, KS, May 3, 2008
- 148. *Mathematics Professor: Fun Thinking for a Living*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 8, 2008
- 147. *So, Do You Sudoku?*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 8, 2008
- 146. *Using a SMART Board in Abstract Algebra*, Joint Mathematics Meeting, San Diego, CA, January 7, 2008
- 145. Mathematical Genealogies, colloquium, PSU, November 27, 2007
- 144. Wallpaper Patterns and Crystallographic Groups, College of Arts & Sciences Lecture Series, PSU, November 15, 2007
- 143. Bell-y Math, PSU Mathematics Honor Day, October 2007

- 142. *Mostly Bells with a little bit of Math*, 15<sup>th</sup> Annual Mid-America Regional Bell Meeting, Branson, MO, September 16, 2007
- 141. Do U Sudoku?, Pittsburg Noon Kiwanis Club, July 5, 2007
- 140. BoomWhacker Math, Kauffman Scholars, Inc. College Residential Institute, PSU, June 2007
- 139. Movie Mathematics, KSMAA, Wichita State University, March 31, 2007
- 138. *Mathematician: A Number One Career*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 10, 2007
- 137. *So, Do You Sudoku?*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 10, 2007
- 136. *Bells with a little bit of Math*, TV program, Visions Unlimited, Missouri Southern State University, January 29, 2007
- 135. Proofs, Equivalence Classes and Groups Sudoku-Style, MAA Session on The Mathematics of Sudoku and Other Puzzles, Joint Mathematics Meetings, New Orleans, LA, January 7, 2007
- 134. Mathematics and Sudoku, Math Club, Pittsburg High School, December 5, 2006
- 133. Do U Sudoku?, PSU Mathematics Honor Day, November 2006
- 132. A Grab Bag of Logic Puzzles, Kansas Alpha KME, November 7, 2006
- 131. Treasure Chest of Numbers, P.E.O. Chapter CP, October 10, 2006
- 130. *Problem Solving with Sudoku*, Kansas Association of Teachers of Mathematics conference, Manhattan, KS, September 22, 2006
- 129. Sudoku Fun, MOKAN Secondary Math Conference, PSU, September 21, 2006
- 128. *Smartboard Lessons*, joint with Karla Childs, MOKAN Secondary Math Conference, PSU, September 21, 2006
- 127. Do U Sudoku?, Math Social and Seminar, Emporia State University, September 11, 2006
- 126. *Smart Teaching with the Smart Board*, joint with Karla Childs and Hazel Coltharp, colloquium, PSU, August 29, 2006
- 125. Mathematics and the Sudoku Puzzle, KSMAA, Cowley College, March 18, 2006
- 124. *Mathematician: A Number One Career*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 11, 2006
- 123. *Totally Tubular Math*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 11, 2006
- 122. *The Sudoku Craze Where's the Math?*, Southeast Area Conference of Mathematics Teachers, March 4, 2006
- 121. The Sudoku Craze Where's the Math?, colloquium, PSU, February 28, 2006

- 120. *Do You Sudoku?*, Kansas Alpha KME/MAA Student Chapter meeting, PSU, February 7, 2006
- 119. Using Colorings of Pascal's Triangle to Visualize Algebraic Concepts, Joint Mathematics Meeting, San Antonio, TX, January 12, 2006
- 118. Bell-y Math, PSU Mathematics Honor Day, November 2005
- 117. *Thinking Outside the Box: Math in Music*, invited keynote speaker, Labette Community College's Math/Science Day for high school students, November 18, 2005
- 116. Pascal's Triangle for Secondary Teachers, Labette Community College's Math/Science Day for high school students, November 18, 2005
- 115. Pascal's Triangle for Secondary Students, Labette Community College's Math/Science Day for high school students, November 18, 2005
- 114. Visualizing Algebraic Concepts through Coloring Pascal's Triangle, Kansas City Regional Mathematics Technology EXPO, October 7, 2005
- 113. Writing to Learn for Elementary Statistics, joint with and presented by Ananda Jayawardhana, Joint Statistical Meetings, Minneapolis, MN, August 2005
- 112. Report on ADVANCE Leadership Institute, colloquium, PSU, April 26, 2005
- 111. Sticking Together: Math and Stamps, KSMAA, University of Kansas, March 19, 2005
- 110. *Mathematician: A Number One Career*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 12, 2005
- 109. *Patterns in Pascal's Triangle*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 12, 2005
- 108. Bells and Math, P.E.O., February 22, 2005
- 107. Mathematical Careers, panel discussion, Riverton Middle School, February 9, 2005
- 106. Bell-y Math, Pittsburg High School Math Club, December 13, 2004
- 105. *Mathematical Connections to Handbells*, Pittsburg chapter of the American Association of Retired Persons, December 2004
- 104. Bell-y Math, PSU Mathematics Honor Day, November 2004
- 103. *Using Coloring to Explore Patterns in Pascal's Triangle*, Kansas Association of Teachers of Mathematics Conference, Topeka, KS, October 22, 2004
- 102. Bell-y Math, Kansas Alpha KME, September 14, 2004
- 101. Lessons I Have Learned Teaching Quant, colloquium, PSU, September 7, 2004
- 100. Visualization Activities for Abstract Algebraic Concepts, poster, PSU Research Day, April 7, 2004
- 99. Cosets in the Belfry, KSMAA, Benedictine College, March 20, 2004

- 98. *Legos in Mathematics*, Southeast Area Conference of College Science and Mathematics Teachers, February 28, 2004
- 97. *Handbells and Mathematics*, Pittsburg, KS chapter of the American Association of University Women, December 2003
- 96. Bell-y Math, PSU Mathematics Honor Day, November 2003
- 95. Effective Implementation of M-D Multirate Systems by Factorization of M-D Polynomial Polyphase Matrices, joint with and presented by Mikhail Tchobanou of Moscow Power Engineering Institute, 5<sup>th</sup> International Conference and Exhibition on Digital Signal Processing and Its Applications, Moscow, Russia, 2003
- 94. Computational Commutative Algebra for the Design of Multi-Dimensional Filter Banks, poster, PSU Research Day, April 9, 2003
- 93. *Using Visualization in Teaching Abstract Algebra Concepts*, KSMAA, Fort Hays State University, April 5, 2003
- 92. Philately Mathematics: A Brief Tour of the History of Math via Stamps, colloquium, PSU, February 13, 2003
- 91. *The PascGalois Project: Visualization Projects for Abstract Algebra*, aiding Kathleen Shannon of Salisbury University in Maryland, Special Session on Teaching Abstract Algebra using Visualization, Joint Mathematics Meetings, Baltimore, MD, January 2003
- 90. Keeping the Platters Spinning: Effective Time Management, panel discussion, Joint Mathematics Meetings, co-sponsored by the Young Mathematicians' Network and Project NExT of the Mathematical Association of America, Baltimore, MD, January 2003
- 89. Bell-y Math, PSU Mathematics Honor Day, November 2002
- 88. Factoring Polynomial Matrices for Digital Filter Bank Design, colloquium, PSU, September 12, 2002
- 87. *Implementation Issues in 2-D Filter Bank Design Based on Matrix Factorization*, joint with and presented by Prof. Mikhail Tchobanou of Moscow Power Engineering Institute, XI European Signal Processing Conference, Toulouse, France, September 2002
- 86. *Design and Implementation of 2-D and 3-D Multirate Systems*, poster session, joint with and presented by Mikhail Tchobanou, International TICSP Workshop on Spectral Methods and Multirate Signal Processing, SMMSP'02, Toulouse, France, September 2002
- 85. Factorization of M-D polynomial matrices for design of M-D multirate systems, joint with Mikhail Tchobanou, MTNS2002 (the 15<sup>th</sup> International Symposium on Mathematical Theory of Networks and Systems), University of Notre Dame, August 2002
- 84. Factoring Polynomial Matrices, poster, joint with Tim Pierce, PSU Research Day, April 10, 2002

- 83. Computational Algebra Methods in Digital Signal Processing, colloquium, PSU, March 12, 2002
- 82. Termespheres: Math and Art, KSMAA, Ottawa University, March 9, 2002
- 81. *Gröbner Bases A Powerful Tool for Solving DSP Tasks*, invited plenary talk, 4<sup>th</sup> International Conference and Exhibition on Digital Signal Processing and Its Applications, Moscow, Russia, February 27, 2002
- 80. AAAS Women's International Science Collaboration grant program report, American Association for the Advancement of Science, Boston, MA, February 2002
- 79. *Time for Your First Sabbatical*... *Now What?*, panel discussion, Joint Mathematics Meetings, San Diego, CA, January 2002
- 78. Bell-y Math, PSU Mathematics Honor Day, November 13, 2001
- 77. Design of M-D Filter Banks by Factorization of M-D Polynomial Matrices, International Conference on Information, Communications and Signal Processing, Singapore, October 2001
- 76. Computational Algebra Methods in the Design of Multi-Dimensional Filter Banks, poster, PSU Research Day, 2001
- 75. Special Cases of Factoring Polynomial Matrices, joint with Tim Pierce, Colloquium, PSU, April 12, 2001
- 74. Mathematical Harmonies, MOKAN mathematics meeting, April 2, 2001
- 73. *Groups, Patterns, and Cellular Automata*, KSMAA, Emporia State University, March 31, 2001
- 72. Being a Mathematician and a Mathematics Professor, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 3, 2001
- 71. *Mathematics as Art*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 3, 2001
- 70. *Using High School Math to Get to Jupiter*, mathematics classes at Jasper (MO) High School, January 26, 2001
- 69. *Planning Your Professional Career*, panel co-organizer Joint Mathematics Meetings, New Orleans, January 2001
- 68. What Makes a Math Department Thrive, panel co-organizer Joint Mathematics Meetings, New Orleans, January 2001
- 67. *Gröbner Bases and the Design and Implementation of Multi-Dimensional Filter Banks*, AMS Session on Field Theory and Commutative Rings, Joint Mathematics Meeting, New Orleans, LA, January 2001

- 66. Some Results in Computational Commutative Algebra, Research Seminar, Moscow State University, November 28, 2000
- 65. Factoring Multivariate Polynomial Matrices, Third International Conference on Digital Signal Processing and Its Applications, Moscow, Russia, December 1, 2000
- 64. Bell-y Math, PSU Math Honor Day, November 16, 2000
- 63. Color It Beautiful A Look at Patterns and Colorings of Pascal's Triangle, Kansas Association of Teachers of Mathematics Conference, MidAmerica Nazarene University, October 7, 2000
- 62. An Application of Computational Commutative Algebra to Signal Processing, KSMAA, Baker University, April 1, 2000
- 61. Being a Mathematician and a Mathematics Professor, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 11, 2000
- 60. *Mathematics as Art*, Expanding Your Horizons in Science and Mathematics conference for middle school girls, Emporia State University, March 11, 2000
- 59. Suslin's Stability Theorem and Multi-dimensional Signal Processing, AMS Session on Rings and Algebras, Joint Mathematics Meetings, Washington, DC, January 2000
- 58. Mathematical Magic Tricks, Kansas Alpha KME meeting, November 1999
- 57. Coloring Pascal's Triangle, PSU Math Honor Day, November 5, 1999
- 56. *Gröbner Bases: Revolutionizing Commutative Algebra*, Colloquium, PSU, October 29, 1999
- 55. Another Algorithm for the Quillen-Suslin Theorem for Polynomial Rings, Missouri Algebra Weekend, University of Missouri, October 1999
- 54. *Computational Methods in Commutative Algebra*, Colloquium, University of Missouri—Rolla, October 1999
- 53. Coloring Pascal's Triangle, Kansas Alpha KME meeting, October 1999
- 52. Using the Internet to Gather History of Mathematics Information for Use in the Secondary Mathematics Classroom, MSSC/MOKAN Secondary Mathematics Conference, September 1999
- 51. Pascal's Triangle Color Me Beautiful, KSMAA, Kansas State University, Manhattan, KS, March 27, 1999
- 50. *Pascal Triangle Colorings*, Southeast Area Conference of College Science and Mathematics Teachers, March 13, 1999
- 49. Knots and Such, PSU Math Honor Day, February 23, 1999

- 48. Another Algorithm for the Quillen-Suslin Theorem for Polynomial Rings, AMS Session on Commutative Algebra, Joint Mathematics Meetings, San Antonio, TX, January 1999
- 47. *Using the Internet to Find History of Mathematics Sources*, PSU/MOKAN Secondary Mathematics Conference, 1998
- 46. A Computational Proof of Gubeladze's Theorem, colloquium, University of Kansas, Lawrence, KS, September 3, 1998
- 45. Cooperative Learning OnLine, KSMAA, Washburn University, March 21, 1998
- 44. *Using Cooperative Learning in the Undergraduate Mathematics Classroom*, Southeast Area Conference of College Science and Mathematics Teachers, PSU, February 29, 1998
- 43. *Is It a Knot or Not?*, Expanding Your Horizons conference for middle school girls, Emporia, KS, February 21, 1998
- 42. *The Career of Mathematics Professor*, Expanding Your Horizons conference for middle school girls, Emporia, KS, February 21, 1998
- 41. *Finding Time When There Is None*, panel discussion, Project NExT Professional Development Workshop, Baltimore, MD, January 9, 1998
- 40. An Algorithm for the Quillen-Suslin Theorem for Monoid Rings, Project NExT/Young Mathematicians Network research poster session, Joint Mathematics Meetings, Baltimore, MD, January 1998
- 39. Using High School Math to Get to Jupiter, MOKAN, December 8, 1997
- 38. *Using Multimedia to Enhance the Mathematics Classroom*, KATM/KATS S.M.A.R.T.T. Conference, Wichita, KS, November 7, 1997
- 37. An Algorithm for the Quillen-Suslin Theorem for Monoid Rings, NExT Trends in Research Special Session, MAA Mathfest, Atlanta, GA in August 1997
- 36. Power Up with PowerPoint, KSMAA, PSU, March 15, 1997
- 35. *The Basic Skills Exams Program at PSU*, Southeast Area Conference of College Science and Mathematics Teachers, PSU, March 1, 1997
- 34. *Trivializing Vector Bundles over Affine Toric Varieties*, American Mathematical Society Special Session on Computational Algebraic Geometry, Joint Mathematics Meetings, San Diego, CA, January 1997
- 33. What Does the First Row of an Invertible Matrix Look Like?, Mathematics and Computer Science Seminar, Emporia State University, November 22, 1996
- 32. An Algorithm for the Quillen-Suslin Theorem for Monoid Rings, Special Session on Commutative Algebra, American Mathematical Society meeting, Rider University, Lawrenceville, NJ, October 5, 1996
- 31. A Picture is Worth... Using Geometer's Sketchpad As a Teaching Tool, PSU Secondary Mathematics Conference. 1996

- 30. An Algorithm for the Quillen-Suslin Theorem for Monoid Rings, joint with and presented by Reinhard Laubenbacher of New Mexico State University, long lecture at MEGA96, 4th International Symposium of Effective Methods in Algebraic Geometry, Eindhoven, The Netherlands, June 6, 1996
- 29. Basic Skills/Gateway/Exit Exams What, Why, and How?, panel discussion, KSMAA, McPherson College, April 20, 1996
- 28. A Computational Algebra Course, KSMAA, McPherson College, April 20, 1996
- 27. Completing a Unimodular Row to an Invertible Matrix over a Monoid Ring, Colloquium, New Mexico State University, March 28, 1996
- 26. What Does the First Row of an Invertible Matrix Look Like?, PSU Colloquium, March 21, 1996
- 25. *The Use of Basic Skills Exams*, Southeast Area Conference of Science and Mathematics Teachers, PSU, 1996
- 24. *Knot Theory for Secondary Students*, PSU Secondary Mathematics Conference, September 1995
- 23. *Teaching a Course on Computational Algebra*, Special Session on Symbolic Computation in the Undergraduate Mathematics Classroom, MathFest, University of Vermont, August 1995
- 22. Topology Potpourri, PSU Summit program for gifted middle school students, June 1995
- 21. Factoring Polynomial Matrices, Kansas Academy of Sciences, PSU, April 1995
- 20. A Report on the First Year of Project NExT (New Experiences in Teaching), KSMAA, Wichita, KS, April 15, 1995
- 19. Topology for Secondary Students, MOKAN, April 3, 1995
- 18. *Gröbner Bases A Computational Algebraists' Power Tool*, Colloquium, Pittsburg State University, February 23, 1995
- 17. An Algorithmic Proof of Suslin's Stability Theorem for Polynomial Rings, Holiday Symposium, New Mexico State University, December 1994
- 16. Beyond Gaussian Elimination, Kansas Alpha chapter of KME, PSU, November 10, 1994
- 15. *Is it a Knot or Not?*, annual Saturday Seminar for gifted elementary and middle school students, Southeast Kansas Special Education Cooperative, October 22, 1994
- 14. *An Algorithm for Suslin's Stability Theorem*, Computer Research/Applications Group, Los Alamos National Laboratory, Los Alamos, NM, July 1994
- 13. An Algorithm for Suslin's Stability Theorem, Algebra Seminar, New Mexico State University, March 1994
- 12. Everything you ever wanted to know about Gröbner Bases ..., Graduate Student Seminar, New Mexico State University, March 1994

- 11. Gröbner Bases, Louisiana State University in Shreveport, February 1994
- 10. An Algorithm for Suslin's Stability Theorem, Mathematical Sciences Institute, Cornell University, February 1994
- 9. Factoring Polynomial Matrices, Emporia State University, February 1994
- 8. *Calculus Reform at Worchester and New Mexico State*, with Brigitte Servatius, Teaching Seminar, Cornell University, November 1993
- 7. Algebraic Vector Bundles over Affine Toric Varieties, Cornell University, October 1993
- 6. Algorithms for the Quillen–Suslin Theorem for Monoid Rings, Special Session on Combinatorial Methods in Computational Algebraic Geometry, Joint Mathematics Meeting, San Antonio, TX, January 1993
- 5. Symbolic Computation in Algebra and Algebraic Geometry: Some Examples, Colloquium, New Mexico State University, November 1992
- 4. *Projective Modules over Certain Monoid Rings*, NSF Regional Geometry Institute, Amherst College, July 1992
- 3. Computational Algebra and Gröbner Bases, Southwest Section of MAA, April 1992
- 2. *Gröbner Bases and a Computational Proof of the Quillen–Suslin Theorem*, Algebra Seminar, New Mexico State University, March 1992
- 1. An Example of the Strength of Character Theory A Theorem of Frobenius, Algebra Seminar, New Mexico State University, August 1991