

Mid-Year Symposium 2013: Undergraduate Research and Creative Work

Monday, December 9, 2013

8:30 am - 3:30 pm

Bridgewater State University

Poster Presentations

Mentor: Dr. Annela Kelly

9:05 - 9:55 am

Ferris Wheel Calculus, by Jocelyn Marshall and Alexandra Smith

Calculus of the Arcade Game, by Danielle LeBoeuf, Tara Lee, and Brittini St. Pierre

Spherical Coordinates of the Earth, by Alexander Ballestros and Shannon Robey

Distances in Space and Parametric Coordinates, by Ashley Hall and Emily Haynes

Kepler's Laws and Orbits, by Chris Hrivnak and Samantha McCracken

Anamorphic Art, by Ting Ting Lin and Shristi Shresta

Ballistic Trajectory, by Patrick Holton, John Steinkrauss

Maximizing the Cobb-Douglas Production Function, by Cristina Gill and Travis Rebello

11:15 - 12:05

Lissajous Curves and Harmonograph, by Kelsey Cummings, Robert Guillette, and Fred Neilan

Insurance Policies and Joint Density Functions, by Courtney Cain and Kolin Campbell

Planetary Motion and Polar Coordinates, by Emanuel Zanzerkia

Taxicab Metric, by Jaeuk Sim

Wrinkled and Bumpy Spheres, by Ben Buzzee and Brandon Mash

April 22, 2013 Undergraduate Research Symposium

Monday, 9:00 AM—3:30 PM

Poster and Oral Presentations

Bridgewater State University

Mentor: Dr. Laura Gross

Descriptive Geometry, by Yurena Amado

Probability in Horse Racing, by Jill Lemieux

Why Don't Americans Vote for Third Parties?, by Mark Baker

Operations Research!, by Joshua Cavanaugh

Teaching Mathematics Through Music, by Alison Ezepik

The Mathematics of Tuning, by Michele Gardiner

Graph Theory: From Konigsberg to the World Wide Web, by Megan Marquit

Present Day Reliance on Cryptography, by Marina Mongeau

Poker: It's Not Just Luck, by Amie Noone

The Mathematics of Dance, by Ashlee Pavao

Introduction to Solar Panel Physics, by Alex Roche

Prisoner's Dilemma: A Mathematical Approach to Games, by Camille Schulman

Mentor: Dr. Kevin Rion

Consequences of Abandoning Individual Omniscience in Models of Trade and Preference, by Joshua Bernard

Mentor: Dr. Matthew Salomone

Loxodromic Spirals and M.C. Escher's Sphere Surface, Oral Presentations by James Marcotte

Mentor: Dr. Irina Seceleanu

The Great Debate: Derivatives Versus Integrals, by Kelsey Cummings, Robert Guillette, Brandon Mash, Nicole Mercer, Kevin Roebuck, and Emanuel Zanzerkia

The Great Debate: Integrals Versus Derivatives, by Alec Benoit, Courtney Cain, Kolin Campbell, Fred Neilan, Aaron Roberts, and Devon West-Coates