

Spring 2014 Projects

Adam Deaton	Solitons
Billy Swartworth	Ideal Factorization
Brian Zachary Abel	The DRP: One Inept Physics Major and Matrix Lie Algebras
Carlos Villarroel	Highlights in the Study of Topological Surfaces
Cody Freitag	Compressed Sensing
Colin Walker	A Return to Linear Algebra
Daniel Chupin	Morse Theory
David Cook	Optimal Transport
Dean Menezes	elliptic curves
Dylan Airey	Toric Varieties
Feng Ling	Du Val Singularities
James Kennington	Lyapunov Stability in Dynamical Systems
Jay Hathaway	The Representation Theory of Semisimple Lie Algebras
Julian Michael	Induction and Coinduction
Kassandra Gonzalez	Binomial Asset Pricing Theory
Khoa Pham	Cover Me!: $SU(2)$ and $SO(3)$
Luke Pharr	Poincare Recurrence
Maggie Miller	Dehn Surgery
Mark Bakke	Why Project? An Insight into Projective Geometry
Matthew Butcher	Manifolds and Tensors
Michael Miyagi	Turtle Conservation Using Population Modeling
Michelle Lawrence	A Fresh Canvas for Mathematical Learning
Nick Bhattacharya	Cluster Coordinates on Grassmannians
Olivier Salaün	Game theory
Ryan Zabcik	Computational Topology
Sadie Sublousky	Finding squares of the form $x^2 = kp + 2$
Sarafina Nance	Smooth Manifolds
Sophia Dever	How to Tell a Doughnut from a Beignet: The Fundamental Group
Surya Raghavendran	Beilinson-Bernstein Localization
Thomas Cartwright	Commutative Rings
William Shipman	Basic theory of weak solutions to partial differential equations