

# STUDENT TALKS

## 2017 Allegheny Mountain Section Meeting at Duquesne University

	<i>College Hall 220</i>	<i>College Hall 223</i>	<i>College Hall 225</i>	<i>College Hall 446</i>	<i>College Hall 447</i>	<i>College Hall 449</i>	<i>College Hall 553</i>
<b>7:35</b> – <b>7:50</b>	<b>Tristan Hyde</b> <i>Slippery Rock Univ.</i>  A Problem Related to the Game of Set	<b>Karen Adams</b> <i>Shepherd University</i>  A Discrete Case of Minkowski's Inequality using Induction	<b>Nicole Chris</b> <i>West Liberty Univ.</i>  Reverse Engineering Newton's Method	<b>Donovan Ramsey</b> <i>Duquesne Univ.</i>  Geometry -vs- Intensity in Image Denoising	<b>Mary Jaskowak</b> <i>Mercyhurst Univ.</i>  The Fourth Dimension	<b>Michael Wigal</b> <i>West Virginia Univ.</i>  Online Coloring Blowups of a Known Graph	<b>Bohan Qu</b> <i>Univ. of Pittsburgh at Johnstown</i>  It Is Just a Number: 12345679 and Its Properties
<b>7:55</b> – <b>8:10</b>	<b>Nevena Kulina</b> <i>Edinboro Univ. of PA</i>  Mathematics of Tennis	<b>Sarah Roberts</b> <i>Juniata College</i>  Patterns in Fractals: The Multibrot & Julia Sets	<b>Brady Sheehan</b> <i>Duquesne Univ.</i>  Geometry in Patch Based Non-Local Denoising Algorithms	<b>Nico Gabriel, et al.</b> <i>Univ. of Pittsburgh</i>  ER Data Analysis	<b>Aysha Nuhuman</b> <i>Washington &amp; Jefferson College</i>  Counting Rectangles, Squares, Blocks and Cubes	<b>Mark Leadingham</b> <i>West Virginia Wesleyan College</i>  An Introduction to Chaotic Behavior	<b>Man Wing Chan &amp; Erica Flanders</b> <i>Gannon Univ.</i>  Purple Martin Die-Off Rates in 2014 and 2015
<b>8:15</b> – <b>8:30</b>	<b>Alexander Michels</b> <i>Westminster College</i>  Repeated Play Games	<b>Hao Hu</b> <i>Univ. of Pittsburgh</i>  Computing Indicators of Radford Algebras	<b>Andrea Sajewski</b> <i>Duquesne Univ.</i>  Linear Transforms and Sparse Representations for Processing Medical Image Data	<b>Veronica Kirchner</b> <i>Juniata College</i>  Random Forest Models for Microbial Communities	<b>Victoria Jakicic</b> <i>Indiana Univ. of PA</i>  Magic Polygons and Their Properties	<b>Brandon Eschborn</b> <i>Edinboro Univ. of PA</i>  History of Number Systems	<b>Derek Prijatelj &amp; Daniel Watson</b> <i>Duquesne Univ.</i>  Analysis of the Implementation of Ensemble Methods in Automated Stylometry
<b>8:35</b> – <b>8:50</b>	<b>Kevin Zhang</b> <i>Univ. of Pittsburgh</i>  Predicting MLB Success	<b>Tyler Gaona</b> <i>Duquesne Univ.</i>  Primes in Arithmetic Progression: A Taste of Analytic Number Theory	<b>Paul LeVan</b> <i>Gannon University</i>  An 'Anti'-Waring Problem	<b>Avishkar Khanal</b> <i>Indiana Univ. of PA</i>  Optimal Mean and Variance Portfolio Selection	<b>Luke Mariotti</b> <i>Penn State Behrend</i>  Students' Conceptions of Limit in High School versus College Calculus	<b>Rachael Troutman</b> <i>Edinboro Univ. of PA</i>  Nine-Point Circle Theorem	<b>Jacob Coleman</b> <i>West Virginia Wesleyan College</i>  Distributive Embeddings of Groups into Monoids of Binary Operations
<b>8:55</b> – <b>9:10</b>	<b>Adam Anthony</b> <i>Juniata College</i>  Fairness of Skewed Dice	<b>Kevin Shuman</b> <i>Edinboro Univ. of PA</i>  Properties of Cut Points in Point-Set Topology	<b>Trevor Arrigoni</b> <i>Westminster College</i>  Computational Analysis of Dyck Path Characteristics	<b>Trevor Williams</b> <i>West Virginia Wesleyan College</i>  Properties of Elementary Cellular Automata	<b>Meghan Sunners, Ben Turner, Robin Hwang, &amp; Everardo Tellez</b> <i>Univ. of Pittsburgh</i>  BIG Problems: Return on Investment Calculator	<b>Denver Stahl</b> <i>Washington &amp; Jefferson College</i>  Using the Laplace Transform to Determine Equilibrium of a Circular Cascade	<b>Matthew Sobocinski</b> <i>Duquesne Univ.</i>  TAPS (Typing Analysis Password System): Multi-Factor Biometric Authentication via Keystroke Dynamics
<b>9:15</b> – <b>9:30</b>	<b>Oliver Miles</b> <i>Penn State Behrend</i>  Bridge Tournament Scheduling Problem	<b>Bradley Wolfe</b> <i>Edinboro Univ. of PA</i>  The Zariski Topology	<b>Xueyi Lei &amp; Shulai Yang</b> <i>Washington &amp; Jefferson College</i>  Lill's Method	<b>Joshua Baktay</b> <i>Duquesne Univ.</i>  The Multivariate Gaussian Distribution and Spatial Data Analysis	<b>Annie Small</b> <i>Juniata College</i>  The Mathematics of the Flip and Horseshoe Shuffles	<b>Emma Everett</b> <i>Univ. of Pittsburgh</i>  Szemerédi Regularity Lemma Illustrated	