Morning – Talks (Friday, March 31ˢᵗ 2017)
(U – Undergraduate, G- Graduate, F – Faculty)

Time/Room	Innovation A- 233A	Innovation B-233B	Ambition A-277A	Ambition B-277B	Legacy A-279A	Legacy B-279B	Pride - 275
8:30-8:45	**Ja'Bria Miles (U)** *(Texas A&M –Commerce)* A single case study of students with autism in secondary mathematic**s**	**Aaron McCoy (U)** *(Lamar University)* An Exploration of Wilson's Theorem	**Ashton Short (U)** *(Angelo State U.)* Examining Special Elements in Hypergraphs	**Amira Mahler (U)** *(St. Edward's U)* American Roulette: How Long Can You Play?	**Aser Garcia (U)** *(Tarleton State U.)* Heliocentric Lunar Formation Simulation	**Joseph Brown (G)** *(Tarleton State U.)* Using a Genetic Algorithm to Optimize Structural Stability	**Janak Joshi (G)** *(U. North Texas)* Existence and Non existence of solutions for sublinear problems
8:50-9:05	**Taylor Kline (U)** *(Texas A&M –Commerce)* Reflection, calibration, and achievement in introductory calculus	**David Offner (U)** *(Hardin-Simmons U.)* The Collatz Conjecture: An Undergraduate Approach	**Alan Amaya (U)** *(U. Incarnate Word)* Applications of Graph Theory in the Soccer Field	**Anthony Phillips(U)** *(Steven F. Austin State)* Probability in Baseball	**Kassie Marble (U)** *(Tarleton State U.)* Simulating a Benzene molecule using damped oscillators	**Douglas Rowe (G)** *(Tarleton State U.)* Feel the pressure: Modeling dispersion of fuel particles inside an engine cylinder	**Krystin Steelman(G)** *(Texas Tech University)* Modeling the Early Stages of a Within-Host Viral Infection
9:10-9:25	**Kourtney Holyfield(U)** *(Hardin-Simmons U.)* Hilbert's 23 Problems	**Amy Jenkins (U)** *(Southwestern U.)* Instruments in ones and zeros: How computers mimic Timbre	**Christopher York(U)** *(Lamar University)* Enumerating kth Roots in the Symmetric Inverse Monoid	**Stephanie Thrash(U)** *(St. Edward's U.)* Political Parties and Lottery Voting	**Michael Rubio (U)** *(Tarleton State U.)* Simulating the molecular interactions of water molecules and the formation of ice crystals	**Janine Prukop (G)** *(Tarleton State U.)* Space Balls: Particle Modeling Solar System Formation	**Imelda Trejo (G)** *(UT - Arlington)* Modeling the effects of the immune system on the fracture healing process
9:30-9:45	**Josh Schneider (U)** *(Hardin-Simmons U.)* Hero's Formula	**Talon McCallam (U)** *(El Centro College)* The Divine Ratio: a re-visitation of its majesty	**Jonathan Hodges (U)** *(Lamar University)* Using Graph Theory to Eliminte Discontinuity in Minecraft's Procedural Biome Generation	**Crisel Suarez (U)** *(St. Edward's U.)* North Carolina and Pennsylvania for Boardwalk? Trade Values for Monopoly Real Estate	**William Sumpter(U)** *(Tarleton State U.)* Creating an isotopically smilar Earth-Moon system with correct angular momentum from a giant Impact	**Taylor Hutyra (G)** *(Tarleton State U.)* Sequestration of carbon cles using Parallelized Simulatio of no-slip gas dynamics in a thermophoretic environment	**Richard Harvel (G)** *(Tarleton State U.)* Mathematical Models of Self-Assembly
9:50-10:05	**Madyson Chance (U)** *(El Centro College)* Integration by Method of Undetermined Coefficients	**Will Howard (U)** *(Hardin-Simmons U.)* The Perfect Free Throw	**Julia Eilers (U)** *(Baylor University)* On the number of distinct balanced bipartite directed graphs with every node of outdegree 1	**Tera Benoit (U)** *(Lamar University)* The Hidden Mathematical Analysis of Optimal Play in Massively Multiplayer Games	**Zachery Viray (U)** *(U. Incarnate Word)* Chaos Control:Applying Control Theory to Chaos	**David Ebert (G)** *(Tarleton State U.)* A Particle Model of the Interactions within Fish Schools	**Suyu Liu (G)** *(UT - Arlington)* Absence seizures resulting from disharmonious dialogue between cortical neurons and astrocytes
10:10-10:25	**Tracy Desrochers(U)** *(Hardin-Simmons U.)* Tessellations	**Alejandro Moran (U)** Austin College New Knot Invariants Relating the Alexander and Jones Polynomials	**Lauren Melcher (U)** *(Texas A&M-Commerce)* On a class of few weight codes	**Jason Miller (U)** *(Lamar University)* The Affect of Dice Probability on Player Experience in Tabletop Role-playing Games	**Sergio Melendez (U)** *(U. Incarnate Word)* Weingarten Surfaces from Integrable Partial Differential Equations	**Joseph Brown (G)** *(Tarleton State U.)* A Merry Gander at Gerrymandering	

Afternoon – Talks (Friday, March 31st 2017)
(U – Undergraduate, G- Graduate, F – Faculty)

Time	Visions-209	InnovationA- 233A	Innovation B-233B	Ambition A-277A	Ambition B-277B	Legacy A-279A	Legacy B-279B	Pride - 275
3:15-3:30	**Jane Long (F)** *(Stephen F Austin State)* One Model for a Capstone Course for Mathematics Majors	**Janessa Beach (G)** *(Texas A&M –Commerce)* Relating proofs and revisions:A case study of inquiry-based college geometry course	**Joseph Iaia (F)** *(U of North Texas)* U.S. Presidents and Mathematics	**Reza O. Abbasian (F) John T. Sieben (F)** *(Texas Lutheran U.)* The impact of a natural language interface on novice CAS users	**Chad Huckaby (G)** *(Stephen F. Austin State)* Observations on Convexity of Sets	**Adam Bowden (F)** *(Texas A&M –Commerce)* Splitting ELPAC and Its Applications	**Minchul Kang (F)** *(Texas A&M –Commerce)* Direct D(t) computation from FRAP data reveals various anomalous diffusion types	**Frank Snyder** *(Cengage Learning)* Building Confidence in Developmental Math - MindTap Math Foundations
3:35-3:50	**Jacqueline Jensen-Vallin (F)** *(Lamar University)* The Role of self-Reflection in Math Courses	**Laura Beene (G)** *(Texas A&M –Commerce)* STEM Major Mindset Changes During Their First Undergraduate Mathematics Course	**Timothy Huber (F)** *(UT Rio Grande Valley)* Cultivating Research Opportunities for Students through NSF S-STEM	**John Quintanilla (F)** *(U of North Texas)* How Precalculus Students Can Find the Decimal Expansions of Logarithms	**Paul Schwartz (G)** *(Lamar University)* Properties and examples of Generalized Inverse Limits	**Richard Chandler (F)** *(UNT- Dallas)* Associating Geometry to $U_q(SL_2)$	**Jonathan Mitchell (F)** *(Stephen F. Austin State)* Frequency and Amplitude a Nonlinear Oscillator by Homotopy Analysis Method	
3:55-4:10	**Keith Hubbard (F)** *(Stephen F Austin State)* College Algebra Flipped: Comparative results from 1000 students	**Jeremy Smith (G)** *(Texas Christian U)* Tips for Awarding Partial Credit on Calculus Problems	**James Epperson (F)** *(UT Arlington)* Guidance for Mathematics Teaching Preservice Secondary Mathematics Teachers	**Rebecca Steward (F)** *(Texas A&M –Commerce)* Online Videos that Support Class Material	**Jason A. Hatton (G)** *(Lamar University)* Solving Systems of Differential Equations Using Gradient Descent Under the Sobolev Norm	**Robert Muth (F)** *(Tarleton State U.)* Colored RSK Correspondence	**Bryant Wyatt (F)** *(Tarleton State U)* Creating an Isotopically Similar Earth-Moon system	**Gary Whalen** *(Cengage Learning)* What Might an Online Calculus Course Look Like?
4:15-4:30	**Brittany Hott (F)** *(Texas A&M –Commerce)* East Texas Mathematics Teacher Professional Development Needs	**Luis Aguirre (G)** *(Texas Christian U)* Why Math? A perspective from Applied Calculus students	**Ali Shaqlaih (F)** *(UNT – Dallas)* Fostering Students' Preparation and Achievement in in Upper Level Math Courses	**Eleftherios Gkioulekas (F)** *(UT - Rio Grande Valley)* On the denesting of nested square roots	**Nathanael Hellerman (G)** *(Texas Christian U.)* Optimizing Batting Order: A Markov Chain Approach	**Charles Dorsett (F)** *(Texas A&M –Commerce)* Least and Biggest Topological Properties		
4:35-4:50	**Rebecca Dibbs (F)** *(Texas A&M –Commerce)* Algebra I Interventions: A metasynthesis	**Adam J. Castillo (G)** *(UT-Austin)* Understanding Community College Math Faculty Perceptions	**Sarah Cobb (F)** *(Midwestern State U.)* Linking Math and English through The Martian	**Montie Monzingo (F)** *(SMU)* Amortization schedules: did the student cheat?	**Mary Barker (G)** *(Tarleton State U.)* KLR Algebras in Sage	**Hasan Coskun (F)** *(Texas A&M –Commerce)* Multiple analogues of binomial and Poisson distributions on the set of integer partitions	**Jacob Makaya (F)** *(Texas A&M International)* Static and Steady-State Bubbles in the Channel	
4:55-5:10	**Michael Warren (F)** *(Tarleton State U)* Transcendental functions with a complex twist	**Jordan L. Hess (G)** *(UT – Dallas)* Numbers	**Fred Halpern (F)** *(Royal Path to Math)* Integration by linear combination	**Keith E Emmert (F)** *(Tarleton State U)* Buffon's Needle		**Y. Liu (F)** *(Sun Yat-sen U)* On Low Rank Approxima of Linear Operators	**Scott Cook (F)** *(Tarleton State U.)* No-Slip Billiards	