Thursday

- 8:45am – 8:50am: Opening Remarks
- 8:50am – 9:10am: A Bivariate Spline Analysis of the TEM mode of a Parallel Plate Waveguide  
  Clay Mersmann
- 9:15am – 9:35am: Duality in Optimization  
  Yidong Xu
- 9:40am – 10:00am: The Affine Low-Rank Matrix Completion Algorithm  
  Eric Perkerson
- 10:05am – 10:25am: Debiasing Word Embeddings  
  Andrew Maurer

Coffee Break

- 10:50am – 11:10am: Thinking Inside the (Distinct or Identical) Boxes: A Friendly Introduction to Object Distributions and Stirling Numbers of the Second Kind  
  Catrina May
- 11:15am – 11:35am: Introduction to Grassmannians  
  Joseph Dorta
- 11:40am – 12:00pm: A Mathematical Introduction to Quantum Mechanics  
  Kenneth Allen
- 12:05pm – 12:25pm: Tannakian Reconstruction of Finite Groups  
  Jack Wagner

Lunch Break

- 1:40pm – 2:00pm: About finite groups acting freely on $S^{2k-1}$  
  Swapnanil Banerjee
- 2:05pm – 2:25pm: Ribbon genus, Virtual graphs, and Wirtinger deficiency  
  Jason Joseph
- 2:30pm – 2:50pm: Four-manifold invariants from broken Lefschetz fibrations and trisections  
  William Olsen
- 2:55pm – 3:15pm: Differential Graded Algebras of Legendrian Knots  
  Sarah Blackwell

Coffee Break

- 3:40pm – 4:00pm: What makes a metric super?  
  Terrin Warren
- 4:05pm – 4:25pm: Totally geodesic subspaces of the space of polygons in $\mathbb{R}^3$  
  Erik Schreyer
- 4:30pm – 4:50pm: An Axiomatic Approach to Homology Theory In Algebraic Topology  
  Freddy Saia
- 4:55pm – 5:15pm: Computing the Fundamental Group of the Circle Using Van Kampen’s Theorem  
  Ernest Guico
Friday

• 8:30am – 8:50am: Hasse Principle Violations of Quadratic Twists of Hyperelliptic Curves
  \textit{Lori Watson}

• 8:55am – 9:15am: Iwasawa Theory of Elliptic Curves
  \textit{Makoto Suwama}

• 9:20am – 9:40am: Collatz Conjecture
  \textit{Komal Agrawal}

• 9:45am – 10:05am: First Digits of $2^n$
  \textit{Peter Woolfitt}

Coffee Break

• 10:30am – 10:50am: Small prime power residues
  \textit{Kubra Benli}

• 10:55am – 11:15am: Existence of positive solution for fractional $p$ laplacian equation
  \textit{Jinsil Lee}

• 11:20am – 11:40am: Irreducible quadratic polynomials and Euler’s function
  \textit{Noah Lebowitz-Lockard}

• 11:45am – 12:05am: Galois theory and Covering Spaces
  \textit{Amelia Ernst}

• 12:10pm – 12:30pm: Geometry and Galois Theory
  \textit{Nolan Schock}

Lunch Break

• 1:45pm – 2:05pm: Synchrony and bistability in a Boolean network model of the L-arabinose operon
  \textit{Andy Jenkins}

• 2:10pm – 2:30pm: Subsequence Pattern Packing in Permutations and Compositions
  \textit{Matt Just}

• 2:35pm – 2:55pm: Good subsets of the unit circle
  \textit{Ziqing Xiang}

• 3:00pm – 3:20pm: Fractional Coloring
  \textit{Kirsten Morris}

Coffee Break

• 3:45pm – 4:05pm: Ultrafilters and Arrow’s Impossibility Theorem
  \textit{David Galban}

• 4:10pm – 4:30pm: Sudoku Symmetry Group
  \textit{Alex Newman}

• 4:35pm – 4:55pm: Hodge Theory, Period Maps and Period Domains
  \textit{Benjamin Tighe}

• 5:00pm – 5:20pm: An Overview of Compactifying Moduli Spaces
  \textit{Xian Wu}