

## 2017

- The Fraïssé Limit of Finite Dimensional Matrix Algebras With the Rank Metric
- The Realization Problem for Prism Manifolds II
- Generalizing the Infinitary Gower's Theorem and the Carlson-Simpson Theorem
- Embeddings of p-ADIC ADS/CFT Holography
- Property HT
- Entanglement Entropy for Spectral Triples
- Quantum Borel Chromatic Number
- The Spectral Action on Multifractal Robertson-Walker Cosmologies and Apollonian Circle Packing
- A Formal Language-Based C\*-Algebra for the Brillouin Zone of Quasicrystals
- The Prism Manifold Realization Problem, Part II
- Geometric Models of Syntax
- The Polynomial Freiman-Ruzsa Conjecture of Shift-Minimal Downsets

## 2016

- The Realization Problem for Prism Manifolds
- Extending a Bound for the Erdős Distinct Distances Problem to Higher Dimensions
- Bounding the Checkerboard Connectivity
- An Investigation of Quantum Graphs
- An Infinitary Generalization of Gowers-Carlson-Simpson
- The Realization Problem for Prism Manifolds
- Spectral Action for Multifractal Robertson-Walker Cosmologies
- Improving the Bound on the Determinant-Permanent Problem
- Bounds on the Number of Plane Graphs
- Conformal Operators on Noncommutative Tori
- q-Deformed Bost-Connes Systems
- A Dynamical Systems Model for Language Evolution
- The Realization of Prism Spaces by Integral Dehn Surgery
- Developing a Recommender System Based on Ordinal Relationships Between Product Reviews

## 2015

- Reciprocity Laws on Arithmetic Surfaces
- Beltrami Differentials and the Gauss-Bonnet Theorem for Noncommutative Two Tori
- Spectral Action for Bianchi-Type IX Minisuperspace
- Explicit Orbit Construction for the Matsuki Correspondence for the Affine Grassmannian
- The Invariant Theory of the Order 3 Automorphism of  $\mathfrak{so}(8)$
- Using Lens Cuttings to Derive Upper Bounds for Incidence Problems
- On the Bounds of the Carbery Rectangle Problem
- Ramified Coverings of the Complex Projective Line With Semisimple Galois Groups
- A Determination of an Explicit Set of Coset Representatives for Double Coset Spaces Involving Open-Compact Subgroups of  $SO_5$
- Geometric Flows in Quantum Information: Ricci Flow in a Matrix Geometry

- Computation of Heegaard Floer Correction Terms
- Arithmetic Topology: Bost-Connes Quantum Statistical Mechanical System of Branched Covering of 3-sphere  $S^3$
- Upper Bounds for Non-Crossing Planar Graphs
- Investigating Supersymmetry Through Combinatorics

2014

- The Spectral Action of the Packed Swiss Cheese Cosmology
- Motivic and Computational Complexity of the Potts Model With an External Magnetic Field
- The Cone of Betti Tables Over the Homogeneous Coordinate Ring of Three Noncollinear Points in  $P^2$
- Triangulations of Hyperbolic 3-Manifolds
- KMS Weights on Building  $C^*$ -algebras
- An Adaptation of the Potts Model for Linguistic Parameter Change
- Finite Sets With No Singleton Intersection
- Geometry of Brachistochrones and Tautochrones in Radially Dependent Force Fields
- Graph Grammars and the Insertion Lie Algebra of Quantum Field Theory
- Intersections of Cycles in Matchings