36th Automorphic Forms Workshop Oklahoma State University May 20-24, 2024

Monday, May 20th - Graduate Student Bootcamp

| 08:30 - 09:00 | Registration | Room 101 |
|---------------|-----------------------------|---|
| 09:00 - 10:00 | Lea Beneish | Lecture on Moonshine |
| 10:00 - 10:30 | Break | MSCS 423 |
| 10:30 - 11:30 | Claire Frechette | Lecture on Automorphic L-Functions |
| 11:30 - 13:30 | Lunch | |
| 13:30 - 14:30 | Tian An Wong | Lecture on an Introduction to the Langlands program |
| 14:30 - 15:00 | Break | MSCS 423 |
| 15:00 - 16:00 | Zhining Wei | Lecture on an Introduction to Siegel Modular Forms |
| 16:30 - 17:30 | Panel Discsussion and Pizza | |

Tuesday, May 21st - 36th Automorphic Forms Workshop

| 08:30 - 09:00 | Registration | MSCS Room 101 |
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| 09:00 - 09:10 | Opening Remarks | MSCS Room 101 |
| 09:10 - 09:30 | Kimball Martin | Distribution of Rationality Fields |
| 09:40 - 10:00 | Marcella Manivel | A Zoo of Automorphic Differential Operators |
| 10:10 - 10:30 | Lucas Perryman-Deskins | q-series Identities Connected to Ideals in Quadratic Fields |
| 10:40 - 11:00 | Coffee/Tea Break | MSCS 423 |
| 11:10 - 11:30 | Peter Marcus | Improvements to Sturm Bounds |
| 11:40 - 12:00 | Brundaban Sahu | Evaluation of Convolution Sums and Modular Forms |
| 12:00 - 14:00 | Lunch Break | |
| 14:00 - 14:20 | Erin Williams | The Non-vanishing of Traces of Hecke Operators |
| 14:30 - 14:50 | Erick Ross | Nonvanishing of the Second Coefficient of the T_m Hecke Polynomials |
| 15:00 - 15:20 | Karin Ikeda | On Real Zeros of the Hurwitz Zeta Function |
| 15:20 - 15:40 | Coffee/Tea Break | MSCS 423 |
| 15:40 - 16:00 | Steven J. Miller | Upper Bounds for the Lowest First Zero in Families of Cuspidal Newforms |
| 16:10 - 16:30 | Debmalya Basak | A Pair Correlation Surface Associated to the Zeros of L -Functions |
| 16:40 - 17:00 | Tianyu Ni | Explicit Linear Relations between Special Values of Derivatives of L -Functions |
| 17:10 - 18:10 | Panel Discussion | Building Community and Collaborations |

Wednesday, May 22nd - 36th Automorphic Forms Workshop

| 09:00 - 09:20 | Ralf Schmidt | Dimension Formulas for Siegel Modular Forms of Level 4 |
|---------------|-------------------------------|---|
| 09:30 - 09:50 | Shifan Zhao | Weighted Low-lying Zeros of L -functions Attached to Siegel Modular Forms |
| 10:00 - 10:20 | Jolanta Marzec-Ballesteros | Doubling Method for Self-dual Linear Codes |
| 10:30 - 11:00 | Coffee/Tea Break | MSCS 423 |
| 11:00 - 11:20 | Katsumi Kina | Double Eisenstein Series and Modular Forms of Level 4 |
| | Michael Allen | A General Approach to the Modularity of Hypergeometric Motives /MSCS 115 |
| 11:30 - 11:50 | Abhash Kumar Jha | Differential Operators Acting on Jacobi Forms and Jacobi Poincaré Series |
| | Brian Grove | Explicit Modularity Results via Hypergeometric Methods /MSCS 115 |
| 12:00 - 14:00 | Lunch Break | |
| 14:00 - 14:20 | Robert Hough | Subconvexity of M. Sato's Zeta Functions |
| 14:30 - 14:50 | Steven Creech | Mass Equidistribution: Cocompact Vs. Non-Cocompact Surfaces |
| 15:00 - 15:20 | Carsten Peterson | Quantum Ergodicity in the Level Aspect on Higher Rank Real and p -adic Locally Symmetric Spaces |
| 15:20 - 15:50 | Coffee/Tea Break | MSCS 423 |
| 15:50 - 16:10 | Amy Woodall | The Weil Bound for Generalized Kloosterman Sums of Half-integral Weight |
| 16:20 - 16:40 | Swati | Congruence Properties Modulo Prime Powers for a Class of Partition Functions |
| 16:50 - 17:10 | Michael Hanson | The First Low Point in the Theta Cycle of Modular Forms Modulo p^2 |
| 17:20 - 17:40 | Travis Grigsby | Fibers of Projected Richardson Varieties |

Thursday, May 23rd - 36th Automorphic Forms Workshop

| 09:00 - 09:20 | Tian An Wong | Stable Transfer Factors |
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| 09:30 - 09:50 | Amit Ophir | Stable Lattices in Representations over p -adic Fields |
| 10:00 - 10:20 | Subha Sandeep Repaka | A Reducibility Problem for Even Unitary Groups: the Depth Zero Case |
| 10:30 - 11:00 | Coffee/Tea Break | MSCS 423 |
| 10:00 - 11:20 | Ayan Maiti | Unitarizibility for Metaplectic Group of Small Order |
| 11:30 - 11:50 | Devjani Basu | p -modular Representations of $\mathrm{SL}(3)$ over a Finite Field |
| 12:00 - 14:00 | Lunch Break | |
| 14:00 - 14:20 | Wing Hong Leung | Beyond Endoscopy, Functional Equation and Converse Theorem |
| 14:30 - 14:50 | Krishnarjun Krishnamoorthy | Determination of Hilbert Modular Forms Using Squarefree Coefficeints |
| 15:00 - 15:20 | Pengcheng Zhang | Converse Theorems for Hilbert Modular Forms |
| 15:20 - 15:50 | Coffee/Tea Break | MSCS 423 |
| 15:50 - 16:10 | Shivansh Pandey | Converse Theorem for Jacobi Forms of Half-integral Weight |
| 16:20 - 16:40 | Sudhir Pujahari | Sato-Tate Conjecture in Arithmetic Progressions for Certain Families of Elliptic Curves |
| 16:50 - 17:10 | Zhining Wei | Effective Open Image Theorem for Pairs of Elliptic Curves |
| 17:20 - 18:20 | Panel Discussion | How to Navigate Your Early Career Path |

Friday, May 24th - 36th Automorphic Forms Workshop

| 09:00 - 09:20 | Karen Taylor | A New Class of Period Functions |
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| 09:30 - 09:50 | Amiya Kumar Mondal | The Doubling Construction for Integral Representations of L -functions |
| 10:00 - 10:20 | Francis Dunn | Rankin-Cohen Type Differential Operators on Automorphic Forms |
| | Mohit Tripathi | Splitting Hypergeometric Functions over Roots of Unity /MSCS 115 |
| 10:30 - 11:00 | Coffee/Tea Break | MSCS 423 |
| 11:00 - 11:20 | Peikai Qi | Iwasawa λ Invariant and Massey Products |
| 11:00 - 11:20 | Zachary Porat | Additional Computations of the Hecke Action on the Cuspidal Cohomology of Congruence Subgroups of $SL(3,\mathbb{Z})$ /MSCS 115 |
| 11:30 - 11:50 | Kin Ming Tsang | Refinements on Strong Multiplicity One for GL(2) |
| | Caner Nazaroglu | Precision Asymptotics for Partitions Featuring False-Indefinite Theta Functions /MSCS 115 |
| 12:00 - 14:00 | Lunch Break | |
| 14:00 - 14:20 | Yaacov Kopeliovich | Revisiting the Igusa Mapping |
| 14:30 - 14:50 | Dermot McCarthy | Siegel Eigenforms Constructed from Igusa Theta Constants |
| 15:00 - 15:20 | Constantinos Papachristoforou | Representation Theory of p -adic Groups |
| 15:20 - 15:50 | Coffee/Tea Break | MSCS 423 |
| 15:50 - 16:10 | Nhat Hoang Le | The Local Twisted Gan-Gross-Prasad Conjecture |
| 16:20 - 16:40 | Finn McGlade | Fourier Coefficients and Algebraic Cusp Forms on $\mathrm{U}(2,n)$ |
| 16:50 - 17:10 | Xinchen Miao | Local Integrability of Bessel Functions on $\mathrm{GL}(n)$ |