



# Xingting Wang

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## Research Interests

Algebra. Areas of special interest to me are tensor categories, quantum groups, Poisson algebras, cohomology theory, and representation theory.

## Academic Degrees

- **Ph.D. Mathematics**, University of Washington. Advisor: James Zhang. Aug. 2014  
Dissertation: “Classification of connected Hopf algebras up to prime-cube dimension.”
- **B.S. Mathematics**, Fudan University (China). July 2007

## Appointments

- **Assistant Professor**, Howard University. August, 2018-present
- **Research Assistant Professor**, Temple University. July, 2015-June, 2018
- **Teaching Visitor**, University of California at San Diego. Sept., 2014-March, 2015

## Preprints & Publications

- (45) Twisting Manin’s universal quantum groups and comodule algebras, (with H. Huang, V. Nguyen, C. Ure, K. Vashaw and P. Veerapen), preprint (2022), arXiv:2209.11621.
- (44) Twists of graded Poisson algebras and applications, (with X. Tang and J. J. Zhang), preprint (2022), arXiv:2206.05639.
- (43) Homological properties of 3-dimensional DG Sklyanin algebras, (with X.-F. Mao, H. Wang, Y.-N. Yang and M.-Y. Zhang), preprint (2021), arXiv:2009.03524.
- (42) A cogroupoid associated to preregular forms, (with H. Huang, V. Nguyen, C. Ure, K. Vashaw and P. Veerapen), preprint (2021), arXiv:2112.09098.
- (41) Twisting of graded quantum groups and solutions to the quantum Yang-Baxter equation, (with H. Huang, V. Nguyen, C. Ure, K. Vashaw and P. Veerapen), to appear *Transform. Groups*.
- (40) Cancellation and skew cancellation for Poisson algebras, (with J. Gaddis and D. Yee), *Math. Z.* 301 (2022), 3503–3523.
- (39) DG algebra structures on the quantum affine  $n$ -space  $\mathcal{O}_{-1}(k^n)$ , (with X.-F. Mao and M.-Y. Zhang), *J. Algebra* 594 (2022), 389–482.
- (38) Poisson geometry and representations of PI 4-dimensional Sklyanin algebras, (with C. Walton and M. Yakimov), *Selecta Math.* 27, (2021), 1–60.
- (37) Reflection groups and rigidity of quadratic Poisson algebras, (with J. Gaddis and P. Veerapen), *Algebr. Represent. Theory* (2021).
- (36) New approaches to finite generation of cohomology rings, (with V. Nguyen and S. Witherspoon), *J. Algebra* 587 (2021), 390–428.
- (35) Poisson Dixmier-Moeglin equivalence from a topological point of view, (with J. Luo and Q.-S. Wu), *Israel J. Math.*, (2020), 1–37.
- (34) A note on the duality between Poisson homology and cohomology, (with J.-F. Lü and G. Zhuang), *Comm. Algebra* 48 (10) (2020), 4170–4175.
- (33) A note on generic Clifford algebras of binary cubic forms, (with L. Wang), *Algebr. Represent. Theory* 23 (4) (2020), 1797–1806.
- (32) The Zariski cancellation problem for Poisson algebras, (with J. Gaddis), *J. Lond. Math. Soc.* 101 (2020) no. 3, 1250–1279.
- (31) Nonsplit module extensions over the one-sided inverse of  $k[x]$ , (with Z.-P. Lu and L. Wang), *Involve, a journal of mathematics* 12 (2019), no. 8, 1369–1377.
- (30) Gelfand-Kirillov dimension of cosemisimple Hopf algebras, (with A. Chirvasitu and C. Walton), *Proc. Amer. Math. Soc.*, 147 (2019), 4665–4672.

- (29) PBW-basis for universal enveloping algebras of differential graded Poisson algebras, (with X.-G. Hu and J.-F. Lü), *Bull. Malays. Math. Sci. Soc.* 42 (2019), no. 6, 3343–3377.
- (28) Primitive deformations of quantum  $p$ -groups, (with V. Nguyen and L. Wang), *Algebr. Represent. Theory* 22 (2019), no.4, 837–865.
- (27) The Dixmier-Moeglin equivalence, Morita equivalence, and homeomorphism of spectra, (with J. Bell and D. Yee), *J. Algebra* 534 (2019), 228–244.
- (26) On  $q$ -commutative power and Laurent series rings at roots of unity, (with E. S. Letzter and L. Wang), *Comm. Algebra* 47 (2019), no. 5, 2149–2156.
- (25) Hopf algebras of prime dimension in positive characteristic, (with S.-H. Ng), *Bull. Lond. Math. Soc.* 51 (2019), no. 3, 459–465.
- (24) A note on Masuoka’s theorem for semisimple irreducible Hopf algebras, *Arch. Math. (Basel)* 113 (2019), no. 1, 11–20.
- (23) Poisson geometry of PI three-dimensional Sklyanin algebras, (with C. Walton and M. Yakimov), *Proc. Lond. Math. Soc.* (3) 118 (2019), no. 6, 1471–1500.
- (22) On quantum groups associated to a pair of preregular forms, (with A. Chirvasitu and C. Walton), *J. Noncommut. Geom.* 13 (2019), no. 1, 115–159.
- (21) On the structure and cohomology ring of connected Hopf algebras, (with K. Erdmann and Ø. Solberg), *J. Algebra* 527 (2019), 366–398.
- (20) DG Poisson adjoint action and its application, (with X.-J. Li, X.-G. Hu, J.-F. Lü), *Eur. J. Pure Appl. Math.* 12 (2019), no.1, 14–24.
- (19) Finite generation of some cohomology rings via twisted tensor product and Anick resolutions, (with V. Nguyen and S. Witherspoon), *J. Pure Appl. Algebra* 223 (2019), no. 1, 316–339.
- (18) Indicators of pointed Hopf algebras of dimension  $pq$  over characteristic  $p$ , (with S. Chen, T. Liu, and L. Wang), *Missouri J. Math. Sci.* 30 (2018), no. 2, 176–184.
- (17) Enveloping algebras of double Poisson-Ore extensions, (with J.-F. Lü, S.-Q. Oh, and X. Yu), *Comm. Algebra* 46 (2018), no. 11, 4891–4904.
- (16) Indicators of Hopf algebras in positive characteristic, (with L. Wang), *Arch. Math. (Basel)* 111 (2018), no. 5, 485–491.
- (15) A note on the bijectivity of antipode of a Hopf algebra and its applications, (with J.-F. Lü, S.-Q. Oh, and X. Yu), *Proc. Amer. Math. Soc.* 146 (2018), no. 11, 4619–4631.
- (14) Pointed  $p^3$ -dimensional Hopf algebras in positive characteristic, (with V. Nguyen), *Algebra Colloq.* 25, no. 3 (2018), pp. 399–436.
- (13) The structures on the universal enveloping algebras of differential graded Poisson Hopf algebras, (with M. Guo, X. Hu, and J.-F. Lü), *Comm. Algebra* 46, no. 6 (2018), pp. 2714–2729.
- (12) Computing indicators of Radford algebras, (with H. Hu, X. Hu, and L. Wang), *Involve, a journal of mathematics* 11 (2018), no. 2, 325–334.
- (11) Homological unimodularity and Calabi-Yau condition for Poisson algebras, (with J.-F. Lü and G. Zhuang), *Lett. Math. Phys.* 107 (2017), no. 9, 1715–1740.
- (10) Calabi-Yau property under monoidal Morita-Takeuchi equivalence, (with X. Yu and Y. Zhang), *Pacific J. Math.* 290 (2017), no. 2, 481–510.
- (9) On quantum groups associated to non-noetherian regular algebras of dimension 2, (with C. Walton), *Math. Z.* 284 (2016), no. 1, 543–574.
- (8) DG Poisson algebra and its universal enveloping algebra, (with J.-F. Lü and G. Zhuang), *Sci. China Math.* 59 (2016), no. 5, 849–860.
- (7) Universal enveloping algebras of Poisson-Ore extensions, (with J.-F. Lü and G. Zhuang), *Proc. Amer. Math. Soc.* 143 (2015), no. 11, 4633–4645.
- (6) Isomorphism classes of finite dimensional connected Hopf algebras in positive characteristic, *Adv. Math.* 281 (2015), 594–623.
- (5) Universal enveloping algebras of Poisson Hopf algebras, (with J.-F. Lü and G. Zhuang), *J. Algebra* 426 (2015), 92–136.
- (4) Classification of connected Hopf algebras of dimension  $p^3$  I, (with V. Nguyen and L. Wang), *J. Algebra* 424 (2015), 473–505.

- (3) Classification of pointed Hopf algebras of dimension  $p^2$  over any algebraically closed field, (with L. Wang), *Algebr. Represent. Theory* 17 (2014), no. 4, 1267–1276.
- (2) Local criteria for cocommutative Hopf algebras, *Comm. Algebra* 42 (2014), no. 12, 5180–5191.
- (1) Connected Hopf algebras of dimension  $p^2$ , *J. Algebra* 391 (2013), 93–113.

## Grants & Awards

- “Quantum symmetries: Noncommutative geometry and solutions to the QYBE” (awarded), SQuaREs (Structured Quartet Research Ensembles), American Institute of mathematics. 2022-2024
- “Quantum Symmetries: Fusion Rules, Braids, and indicators” (awarded), The Air Force Office of Scientific Research, \$392,585. 09/01/2022-08/31/2025
- “Quantum Symmetries: Fusion Rules, Braids, and Indicators” (awarded), Simons Foundation: Mathematics and Physics Sciences-Collaboration Grants for Mathematicians, \$42,000. 09/01/2020-08/31/2025
- Summer Faculty Research Fellowship at Howard University (awarded), \$10,000. 06/21/2019-08/16/2019
- AMS-Simons Travel Grants (awarded), Simons Foundation, \$4,000. 07/01/2016-06/30/2018

## Teaching Experience

### **Howard University (2018-present)**

- Math 156 Calculus I (instructor),  
Math 210 Modern Algebra I (instructor). Fall 2022
- Math 102 Proof and Problem Seminar II (instructor),  
Math 211 Modern Algebra II (instructor). Spring 2022
- Math 101 Proof and Problem Seminar I (instructor),  
Math 210 Modern Algebra I (instructor). Fall 2021
- Math 102 Proof and Problem Seminar II (instructor),  
Math 419 Topics in Algebra (instructor). Spring 2021
- Math 101 Proof and Problem Seminar I (instructor),  
Math 419 Topics in Algebra (instructor). Fall 2020
- Math198/209 Introduction to Modern Algebra II (instructor). Spring 2020
- Math158 Calculus III (instructor),  
Math197/208 Introduction to Modern Algebra I (instructor). Fall 2019
- Math210 Algebra II (instructor). Spring 2019
- Math6 College Algebra I (instructor),  
Math158 Calculus III (instructor). Fall 2018

### **Temple University (2015-2018)**

- Math3051 Theoretical Linear Algebra (instructor). Spring 2018
- Math3003 Theory of Numbers (instructor). Fall 2017
- Math2043 Calculus III (instructor). Spring 2017
- Math2043 Calculus III (instructor). Fall 2016
- Math3051 Theoretical Linear Algebra (instructor),  
Math2043 Calculus III (instructor). Spring 2016
- Math2043 Calculus III (instructor). Fall 2015

### **University of California at San Diego (2014-2015)**

- Math20A Calculus I (instructor for 400+ ugrads),  
Math20C Calculus III ((instructor for 400+ ugrads). Winter 2015
- Math20A Calculus I (instructor for 400+ ugrads),  
Math20C Calculus III (instructor for 400+ ugrads). Fall 2014

### **University of Washington (2007-2014)**

- Math124 Calculus I (instructor). Summer 2014
- Math120 Pre-Calculus (teaching assistant). Spring 2014

- Math125 Calculus II (instructor). Summer 2013
- Math407 Linear Optimization (grader for senior applied math majors). Fall 2012
- Math120 Pre-Calculus (instructor). Summer 2012
- Math125 Calculus II (teaching assistant). Winter 2012
- Math120 Pre-Calculus (teaching assistant). Fall 2010
- Math125 Calculus II (instructor). Summer 2010
- Math120 Pre-Calculus (teaching assistant). Fall 2009
- Math126 Calculus III (instructor). Summer 2009
- Math126 Calculus III (teaching assistant). Spring 2009
- Math125 Calculus II (teaching assistant). Winter 2008
- Math125 Calculus II (teaching assistant). Spring 2008
- Math504 Modern Algebra (grader for math graduates). Fall 2007

### Professional Services

- Organizer of the AMS Eastern sectional meeting, Howard University, Washington, DC. Spring 2024
- Organizer of AMS Special Session on “Interactions between Representation Theory, Poisson Geometry, and Noncommutative Algebra”, University of Cincinnati (online), Cincinnati, OH. April 2021
- Organizer of AMS Special Session on “Interactions Between Noncommutative Algebra and Noncommutative Algebraic Geometry”, Joint Mathematics Meetings (online), Washington, DC. January 2021
- Organizer of the AMS Special Session on “Interactions between Noncommutative Algebra and Noncommutative Algebraic Geometry”, University of Hawaii at Manoa, Honolulu, HI. March 2019
- Member of senior comprehension exam committee at Math Department at Howard University. 2021-present
- Concentration Advisor for Pure Mathematics at Math Department at Howard University. 2020-present
- Member of algebra qualification exam committee at Math Department at Howard University. 2019-present
- Member of Assessment Council of The Graduate School at Howard University. 2019-present

### Graduates Supervised

- Current Graduate Supervisor: Awn Alqahtani with thesis title “Quantum groups and their invariant theory” (expected graduation Spring 2023) Howard University.
- Graduate Supervisor: Noel Bourne with thesis title “Classification of pointed Hopf algebras in characteristic two” Howard University, 2022 Spring.
- “Nonsplit module extensions over the one-sided inverse of  $k[x]$ ”, participants: Zheping Lu, 2018-2019. A research paper was published in *Involve. A Journal of Mathematics* and the result was presented by Zheping Lu at MAA Allegheny Mountain Section’s Spring Meeting at Shepherd University, March 2019.
- “Pointed Hopf algebras of dimension  $pq$ ”, participants: Tiantian Liu and Si Chen, 2017-2018. A research paper was published in *Missouri J. Math. Sci.* and the result was presented by Tiantian Liu and Si Chen at MAA Allegheny Mountain Section’s Spring Meeting at Penn State Behrend, April 2018.
- “Hopf algebras and Frobenius-Schur higher indicators”, participants: Hao Hu and Xinyi Hu, 2016-2017. A research paper was published in *Involve. A Journal of Mathematics* and the result was presented by Hao Hu at MAA Allegheny Mountain Section’s Spring Meeting at Duquesne University, April 2017.

### Relavant Invited Talks

2022

- “Quantum symmetric groups and their twistings”, Algebra Seminar, Rice University, November.

- “Representations of 4-dimensional Sklyanin algebras through Poisson geometry”, Maurice Auslander International Conference, Boston, October.
- “Twists of graded Poisson algebras and applications”, BIRS Workshop: Noncommutative Geometry and Noncommutative Invariant Theory, Banff, Canada, September.
- “Twists of graded Poisson algebras and applications”, Algebra Workshop (online), Sun Yat-Sen University, Guangzhou, China, September.
- “Twisting of graded quantum groups and solutions to the quantum Yang-Baxter equation”, International Workshop on Hopf algebras (online), Zhejiang Normal University, Jinhua Zhejiang, China, July.
- “Twists of graded Poisson algebras and applications”, Seattle Conference in Noncommutative Algebra & Geometry, University of Washington, June.
- “Twisting of graded quantum groups and solutions to the quantum Yang-Baxter equation”, Seattle Noncommutative Algebra Day (online), University of Washington, March.
- “Noncommutative algebra from a geometric point of view”, Colloquium, George Washington University, February.

## 2021

- “Twisting of graded quantum groups and solutions to the quantum Yang-Baxter equation”, New Developments in Noncommutative Algebraic Geometry (online), Shanghai, China, December.
- “Poisson Dixmier-Moeglin equivalence from a topological point of view”, A conference in honor of Quanshui Wu on his 65 birthday (online), Hangzhou, Zhejiang, China, October.
- “Can a Zhang twist be a cocycle twist?”, Algebra Seminar, Rice University, October.
- “New approaches to finite generation of cohomology rings”, Hangzhou Normal University (online), May.
- “Formality and Koszul algebras”, Learning Seminar: Hochschild Cohomology for Algebras, towards Deformation Theory, Rice University (online), May.
- “ $A_\infty$ -algebras”, Learning Seminar: Hochschild Cohomology for Algebras, towards Deformation Theory, Rice University (online), April.
- “Gourmet’s guide to operad”, Algebra Seminar, Temple University (online), April.
- “What is an operad and where to find it”, Algebra Seminar, Temple University (online), April.
- “New approaches to finite generation of cohomology rings”, AMS Special Session on Hopf Algebras, Tensor Categories, and Related Homological Methods, Brown University (online), March.
- “Reflection and rigidity of quadratic Poisson algebras”, AMS Special Session on Superalgebras, Quantum Groups, and Related Topics, Georgia Institute of Technology (online), March.
- “From classical symmetry to quantum symmetry through the Zoom Video”, Graduate Seminar at Math department, Howard University, Washington DC (online), February.
- “From classical symmetry to quantum symmetry through the Zoom Video”, Seminar at Electrical and Computer Engineering department, Howard University, Washington DC (online), February.
- “Zariski cancellation problem for Poisson algebras”, AMS Special Session on Homological aspects of quantum symmetries and related topics, Washington DC (online), January.

## 2020

- “New approaches to finite generation of cohomology rings”, Seattle Noncommutative Algebra Day, University of Washington, December.
- “Reflection groups and rigidity of quadratic Poisson algebras”, AMS Special Session on Geometry and Representation Theory of Quantum Algebras and Related Topics, University of Utah (online), October.
- “New approaches to finite generation of cohomology rings”, 2020 International workshop on Hopf algebras and tensor categories (online), Lanzhou University, Lanzhou, China, July.

## 2019

- “Topological criterion for Poisson Dixmier-Moeglin equivalence”, Noncommutative Algebraic Geometry Shanghai Workshop, Shanghai Center for Mathematical Sciences, Shanghai, China, November.
- “Noncommutative algebra from a geometric point of view”, Algebra Seminar, University of Illinois at Urbana Champaign, October.

- “Zariski cancellation problem for Poisson algebras”, AMS Special Session on Connections between Noncommutative Algebra and Algebraic Geometry, University of Wisconsin at Madison, September.
- “Noncommutative algebra from a geometric point of view”, International Conference on Representation Theory VIII, Harbin China, July.
- “Finite generation of cohomology rings in positive characteristic”, COAS Junior Faculty Research Workshop, Howard University, March.
- “Noncommutative algebra from a geometric point of view”, Colloquium, Miami University, March.
- “Connected Hopf algebras and related homological properties”, Mini-Workshop: Cohomology of Hopf Algebras and Tensor Categories, Mathematisches Forschungsinstitut, Oberwolfach, Germany, March.
- “Gourmet’s Guide to Noncommutative Algebraic Geometry”, Geometry & Topology Seminar, Howard University, March.
- “Quantum Invariant Theory”, Geometry & Topology Seminar, Howard University, February.
- “Introduction to noncommutative algebraic geometry”, Geometry & Topology Seminar, Howard University, January.

## 2018

- “Finite generation of cohomology rings of some pointed Hopf algebras in positive characteristic”, AMS Special Session on Homological Aspects of Noncommutative Algebra and Geometry, San Francisco State University, October.
- “Irreducible representations of the 4-dimensional Sklyanin algebra at points of finite order”, AMS Special Session on Cluster Algebra, Poisson Geometry, and Related Topics, University of Michigan, October.
- “Noncommutative algebra from a geometric point of view”, Colloquium, Howard University, September.
- “Representations of 4-dimensional Sklyanin algebras through Poisson geometry”, Algebra Seminar, Louisiana State University, May.
- “Noncommutative algebra from a geometric point of view”, Algebra and Combinatorics Seminar, Texas A&M University, April.
- “Cohomology of some Hopf algebras in positive characteristic”, AMS Special Session on Hopf Algebras, Tensor Categories, and Homological Algebra, Northeastern University, April.
- “Representations of 4-dimensional Sklyanin algebras through Poisson geometry”, AMS Special Session on Noncommutative Algebra and Representation Theory, Northeastern University, April.
- “Irreducible representations of the 4-dimensional Sklyanin algebra at points of finite order”, AMS Special Session on Noncommutative Algebraic Geometry and Related Topics, Portland State University, April.
- “Irreducible representations of the 4-dimensional Sklyanin algebra at points of finite order”, AMS Special Session on Noncommutative Algebra and Noncommutative Algebraic Geometry, Ohio State University, March.
- “Noncommutative algebra from a geometric point of view”, Algebra Seminar, University of Buffalo, Buffalo, NY, February.
- “Noncommutative algebra from a geometric point of view”, Colloquium, George Mason University, February.
- “Noncommutative algebra from a geometric point of view”, Colloquium, Embry-Riddle Aeronautical University, February.
- “Finite generation of cohomology rings of some pointed Hopf algebras in positive characteristic”, AMS Special Session on Noncommutative Algebras and Noncommutative Invariant Theory, San Diego, CA, January.

## 2017

- “Pizza and rabbit”, SASE-Talk, Temple University, November.
- “Calabi-Yau property under monoidal Morita-Takeuchi equivalence”, AMS Special Session on Noncommutative and Homological Algebra, University of North Texas, September.
- “Universal enveloping algebras of double Poisson-Ore extensions”, AMS Special Session on Topics Related to the Interplay of Noncommutative Algebra and Geometry, University of North Texas, September.

- “Calabi-Yau property under monoidal Morita-Takeuchi equivalence”, Algebra Extravaganza—a conference in honor of Ellen Kirkman and Martin Lorenz, Temple University, July.
- “The Poisson geometry of the 3-dimensional Sklyanin algebras”, AMS Special Session on Noncommutative Algebraic Geometry and Related Topics, Washington State University, April.
- “Poisson geometry in noncommutative algebras”, Algebra, Combinatorics and Geometry Graduate Student Research Seminar, University of Pittsburgh, March.
- “Poisson geometry of 3-dimensional Sklyanin algebras”, Fudan–Guanghua International Forum for Young Scholars in Mathematics, Fudan University, China, March.
- “Quantum symmetry in noncommutative algebra”, Colloquium, University of Denver, January.
- “Non-noetherian Hopf algebras versus Noetherian Hopf algebras”, AMS Special Session on New Developments in Noncommutative Algebra & Representation Theory, Atlanta, GA, January.
- “Quantum groups associated to a pair of preregular forms”, AMS Special Session on Hopf Algebras and Their Actions, Atlanta, GA, January.

## 2016

- “The relation between unimodularity and Calabi-Yau property for Poisson algebras II”, Algebra Seminar, Temple University, November.
- “The relation between unimodularity and Calabi-Yau property for Poisson algebras I”, Algebra Seminar, Temple University, November.
- “Quantum groups associated to a pair of preregular forms”, Algebra Seminar, Louisiana State University, October.
- “Homological unimodularity and Calabi-Yau condition for Poisson algebras”, AMS Special Session on Quantum Algebra, University of Denver, October.
- “Homological unimodularity and Calabi-Yau condition for Poisson algebras”, AMS Special Session on Noncommutative Ring Theory and Noncommutative Algebra, Bowdoin College, September.
- “Poisson geometry and noncommutative algebras”, Poisson Algebra Workshop, Zhejiang Normal University, China, July.
- “Poisson geometry in noncommutative projective algebraic geometry”, Algebra Seminar, University of Science and Technology of China, June.
- “Quantum symmetry in noncommutative projective algebraic geometry”, Algebra Seminar, Anhui University, China, June.
- “Noncommutative symmetric groups in noncommutative projective algebraic geometry”, Algebra Seminar, Suzhou University, China, June.
- “Primitive deformation and classification of Hopf algebras up to prime-cube dimension”, Algebra Seminar, Zhejiang University, China, June.
- “Quantum groups associated to a pair of preregular forms”, Hopf Algebra and Actions Workshop Part II, University of Washington, April.
- “Noncommutative symmetric groups in noncommutative projective algebraic geometry”, Algebra Seminar, University of Pittsburgh, March.
- “Noncommutative symmetric groups in noncommutative projective algebraic geometry”, Algebra Seminar, Northeastern University, February.
- “Primitive deformations of quantum p-groups II”, Algebra Seminar, Temple University, April.
- “Primitive deformations of quantum p-groups I”, Algebra Seminar, Temple University, March.
- “Universal enveloping algebras of Poisson-Ore extensions”, Joint Mathematics Meeting, Seattle, WA, January.

## 2015

- “Quantum p-groups and their classification in low dimensions”, Algebra Seminar, Louisiana State University, November.
- “Noncommutative symmetric groups in noncommutative projective algebraic geometry”, Algebra Seminar, Temple University, October.
- “On quantum groups associated to non-noetherian regular algebras of dimension 2”, Seattle Noncommutative Algebra Day, University of Washington, August.

- “On quantum groups associated to non-noetherian regular algebras of dimension 2”, Hopf Algebra and Tensor Category Mini-Meeting, University of Southern California, May.
- “On quantum groups associated to non-noetherian regular algebras of dimension 2”, Hopf Algebra Seminar, University of Southern California, April.
- “Universal enveloping algebras of Poisson algebras”, Algebra Seminar, University of California at San Diego, February.
- “Classification of connected Hopf algebras up to prime-cube dimension”, Joint Mathematics Meeting, San Antonio, TX, January.

#### 2014

- “Isomorphism classes of Hopf algebras in positive characteristic”, Algebra Seminar, University of California at San Diego, September.
- “Small unipotent quantum groups arising from primitive control deformation, Hopf Algebra Seminar”, University of Southern California, September.
- “Classification of small unipotent quantum groups in positive characteristic and its applications”, Algebra Seminar, University of Southern California, September.

#### 2013

- “Connected Hopf algebras in positive characteristic”, Algebra Seminar, University of Pittsburgh, November.
- “Finite-dimensional connected Hopf algebras”, AMS Special Session on Recent Developments in Noncommutative Algebra, Temple University, October.

### Selected Conferences & Workshops

- Maurice Auslander International Conference, Woods Hole Oceanographic Institute, Falmouth, MA, Oct. 26-30, 2022.
- BIRS Workshop: Noncommutative Geometry and Noncommutative Invariant Theory, Banff International Research Station, Banff, Canada, Sept. 25-30, 2022.
- Recent Advances and New Directions in the Interplay of Noncommutative Algebra and Geometry, June 20-24, 2022.
- SQuaREs at American Institute of mathematics, Mar 28-Apr. 1, 2022.
- Junior Faculty Forum, Howard University, 2018-present.
- Learning Management System (LMS) Essentials, Howard, University, Nov. 20, 2020.
- 2020 International workshop on Hopf algebras and tensor categories, Lanzhou University, China, July 20-21, 2020.
- Junior Faculty Writing & Creative Works Summer Academy at Howard University, May 26-29, 2020.
- Noncommutative Algebraic Geometry Shanghai Workshop, Shanghai Center for Mathematical Sciences, Shanghai, China, Nov. 11-15, 2019
- International Conference on Representation Theory VIII, Harbin China, July 8-12, 2019.
- Research Week, Howard University, Washington, DC, April 8-12, 2019.
- COAS Junior Faculty Research Workshop, Howard University, Mar. 20, 2019.
- Oberwolfach Mini-Workshop: Cohomology of Hopf Algebras and Tensor Categories, Oberwolfach, Germany, Mar. 3-9, 2019.
- MRC (Mathematics Research Communities) Summer Conference: Quantum Symmetries: Subfactors and Fusion Categories, Whispering Pines Conference Center, West Greenwich, RI, June 10-16, 2018.
- GAP XV (Geometry and Physics-Séminaire itinérant), Pennsylvania State University, College Station, PA, July 31-Aug. 4, 2017.
- Summer 2017 NSF West Coast Lie Theory Workshop, University of California at San Diego, CA, June 3-4, 2017.
- Regularity and Rigidity of Noncommutative Algebras Workshop, University of Washington, Seattle, WA, Mar. 21-23, 2014.
- BIRS Workshop: New Trends in Noncommutative Algebra and Algebraic Geometry, Banff International Research Station, Banff, Canada, Oct. 28-Nov. 2, 2012.

- Noncommutative Invariant Theory Workshop, University of Washington, Seattle, WA, May 26-27, 2012.
- New Trends in Noncommutative Algebra, University of Washington, Seattle, WA, Aug. 9-13, 2010.
- Summer School on Noncommutative Algebra/Geometry, Fudan University, Shanghai, China, Aug. 5-18, 2007.

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updated October, 2022