

Penelope Beall

as of April 30th, 2026
pbeall@ucdavis.edu
pbeall.github.io

Education

- Sep 2025–
present **University of California, Davis**
Pursuing Mathematics PhD
- Aug 2021–
May 2025 **University of Florida**
BS in Mathematics

Papers

- [2] P. Beall, N. Kuzmanovski, Y. O. Li, and A. Seceleanu, *The MacaulayPosets package for Macaulay2*, Journal of Software for Algebra and Geometry, in review, available at <https://arxiv.org/abs/2510.22843>
- [1] P. Beall, E. Boyali, N. Chen, E. Chlachidze, T.T. Dao, F. Garvey, M. Johnson, Y.O. Li, N. Kuzmanovski, K. Ma, T. Mal, R. Marasinghe, Q. Mayo, N. Minsky-Primus, A. Seceleanu, and S. Veerapaneni, *Constructions of Macaulay Posets and Macaulay Rings*, Electronic Journal of Combinatorics, in press, available at <https://arxiv.org/abs/2502.15166>

Presentations

- “Schubert polynomials as generating polynomials”
20-minute talk at UMS Spring 2025 Undergraduate Talk Extravaganza 6 Mar 2025
- “Investigating Constructions of Macaulay Posets and Rings”
15-minute talk at UMRS25@UF 25 Apr 2025
15-minute talk with 2 co-presenters at NCUWM 2025 1 Feb 2025
50-minute talk to UF’s University Math Society (UMS) 24 Jan 2025
poster with 2 co-presenters at the AMS-PME Undergraduate Student Poster Session 10 Jan 2025
20-minute talk with 3 co-presenters at the AMS Special Session on Polymath Jr REU Student Research 8 Jan 2025
- “A few q -analogues”
20-minute talk at UMS Fall 2024 Undergraduate Talk Extravaganza 7 Nov 2024
- “An Equivalent Form of Choice in Linear Algebra”
20-minute talk at UMS Spring 2024 Undergraduate Talk Extravaganza 15 Feb 2024
- “Constructing \mathbb{Z} ”
20-minute talk at UMS Fall 2023 Undergraduate Talk Extravaganza 9 Nov 2023

Conference and Workshop Attendance

- Algomanet 2026 Leipzig 30 June – 3 July 2026
Leipzig University
- 10th Scholarship of Teaching and Learning Conference 5 Dec 2025
UC Davis
- PCMI 2025 (Park City Math Institute) Undergraduate Summer School 6–26 July 2025
Park City
- Macaulay2 Workshop 30 June – 4 July 2025
UW–Madison
- Undergraduate Week of CMND Thematic Program in Topology & Algebraic Geometry 2-6 June 2025
Notre Dame University
- LSU RTG Undergraduate Summer Workshop 19-30 May 2025
Louisiana State University
- 60th Cornell Topology Festival 2-4 May 2025
Cornell University
- 5th OURFA²M² 8-9 Feb 2025
Virtual
- 27th NCUWM (Nebraska Conference for Undergraduate Women in Mathematics) 31 Jan – 2 Feb 2025
University of Nebraska-Lincoln

JMM 2025 (Joint Mathematics Meetings) Seattle	8-11 Jan 2025
BRIDGES 2024 University of Utah	10-12 July 2024
QMSS 2024 (Queen's Mathematics Summer School) Queen's University at Kingston	17-21 June 2024
41st Workshop in Geometric Topology Calvin University	13-15 June 2024
59th Cornell Topology Festival Cornell University	3-5 May 2024
Conference on Enumerative and Algebraic Combinatorics University of Florida	25-27 Feb 2024

Service

Leadership and mentorship

<i>Jan 2026– present</i>	Treasurer for the UC Davis graduate chapter of AWM
<i>Nov 2025– present</i>	GSA Representative for GMAT
<i>Oct 2024– Apr 2025</i>	Mentor for two first-year undergraduates in mentor-mentee program at the UF chapter of AWM
<i>Aug 2024– Apr 2025</i>	Academic Director for the University Math Society at UF

Miscellaneous

- Abstract reviewer for NCUR 2026 (National Conference for Undergraduate Research)

Teaching

Teaching Assistant for:

MAT17C Calculus for Biology and Medicine	<i>Spring 2026</i>
MAT17B Calculus for Biology and Medicine	<i>Winter 2026</i>
MAT17A Calculus for Biology and Medicine	<i>Fall 2025</i>