### **CURRICULUM VITAE**

### Sam Payne

Pennzoil Company Regents Professor of Mathematics University of Texas at Austin Email: sampayne@utexas.edu

## **Employment**

Pennzoil Company Regents Professor of Mathematics, University of Texas at Austin, 2018–

Professor, Yale University, 2017–2018

Associate Professor, Yale University, 2013–2017

Assistant Professor, Yale University, 2010–2013

Acting Assistant Professor, Stanford University, 2006–2010

Clay Research Fellow, 2006–2010

### Education

Ph.D.: University of Michigan, Ann Arbor, 2006

A.B.: Princeton University, 2001

# Visiting Positions

CRM Simons Professor, Montréal, Fall 2023

Henri Poincaré Distinguished Visiting Professor, Stanford University, Spring 2023

University of Tübingen, Fall 2019

Dame Kathleen Ollerenshaw Visiting Professor, Manchester, September 2019

MSRI, Berkeley, Spring 2019

Fields Institute, Toronto, Fall 2016

Von Neumann Fellow, Institute for Advanced Study, Spring 2015

Max Planck Institute, Bonn, Fall 2011–Spring 2012

Free University, Berlin, Summer 2010

MSRI, Berkeley, Spring and Fall 2009

Mittag-Leffler Institute, Djursholm, Spring 2007

#### **Awards and Honors**

Fellow of the AMS, 2023

Simons Fellowship, 2018-2019

Max Planck-Humboldt Medal, 2018

Clay Research Fellowship, 2006–2010

Sumner Myers Thesis Prize, University of Michigan, 2006

#### Professional Service

AMS Council Member-at-Large, 2023-2026

AMS Committee on Meetings and Conferences, 2023–2026, (Chair 2024–2025)

AMS Centennial Fellowship Board, 2020–2022

Épijournal de Géométrie Algébrique Editorial Board, 2020-

Manuscripta Mathematica Editorial Board, 2020–

Selecta Mathematica Editorial Board, 2020-

AMS Mathematical Research Communities Advisory Board, 2014–2017

Géométrie Algébrique en Liberté (GAeL), scientific committee, 2010-

## PhD Students

Jayden Wang, UT Austin, PhD expected 2026

Amy Bradford, UT Austin, PhD expected 2026

Amy Li, UT Austin, PhD expected 2025

Desmond Coles, UT Austin, PhD expected 2025

Netanel Friedenberg, Yale 2020 (Postdoc at Tulane U.)

Jeremy Usatine, Yale 2019, (tenure track at Florida State U.)

Daniel Corey, Yale 2018, (tenure track at U. Nevada, Las Vegas)

Tif Shen, Yale 2017 (Data scientist)

Shaked Koplewitz, Yale 2017 (Software engineer)

Dhruv Ranganathan, Yale 2016 (Professor, Cambridge U.)

Yoav Len, Yale 2014 (Lecturer, U. Saint Andrews)

### Postdoctoral Fellows

Karl Christ, FRG Postdoctoral Fellow, 2023–2024

Sara Torelli, FRG Postdoctoral Fellow, 2023-2024

Chih-Wei Chang, Visiting Postdoctoral Fellow, 2023

Hernan Iriarte, FRG Postdoctoral Fellow, 2022–2024

Yuchen Liu, Gibbs Assistant Professor, 2017–2020 (tenure track, Northwestern U.)

Kalina Mincheva, Gibbs Assistant Professor, 2016–2020 (tenure track, Tulane U.)

Max Kutler, Gibbs Assistant Professor, 2017–2018 (postdoc, Ohio State U.)

José González, Gibbs Assistant Professor, 2014–2016, (tenure track, U. C. Riverside)

Nathan Kaplan, Gibbs Assistant Professor, 2013–2015, (Associate Professor, U. C. Irvine)

Dave Jensen, Visiting Instructor, 2013–2014, (Associate Professor, U. Kentucky)

Dustin Cartwright, NSF Postdoc, 2011–2014, (Associate Professor, U. T. Knoxville)

### Mentorship of Undergraduate Research

Founding director of Summer Undergraduate Mathematics Research at Yale (SUMRY), 2013–2018

Students mentored at Yale: Alec Arana, Julien Clancy, Michael Garn, Elijah Gunther, Matthew Larson, Timothy Leake, Seung Hyun Lee, Brian Lei, Chang Mou Lim, André Moura, Natasha Potashnik, Jason Schuchardt, and Geoffrey Smith, 2011–2018

Students mentored at Stanford: Jay Bhat, Elina Robeva, and Deyan Simeonov, 2008–2010

### Teaching at University of Texas at Austin

Moduli spaces of curves (Math 392C), Fall 2022

Topology (Inquiry Based Learning) (Math 367K), Spring 2022

Topology (Inquiry Based Learning) (Math 367K), Fall 2021

Topology (Inquiry Based Learning) (Math 367K), Fall 2020

Moduli spaces and tropical geometry (Math 390C), Spring 2020

### Teaching at Yale University

Senior seminar (Math 480), Spring 2018

Tropical scheme theory (Math 648), Fall 2017

Vector bundles (Math 622), Spring 2017

Tropical Brill-Noether theory (Math 665), Spring 2016

Commutative algebra (Math 380/500), Fall 2015

K3 surfaces (Math 841), Fall 2015

Calculus (Math 115), Fall 2014

Calculus (Math 115), Spring 2014

Algebraic geometry (Math 658) Spring 2014

Algebraic geometry (Math 658) Fall 2013

Convex polytopes and toric varieties (Math 680), Spring 2013

Vector calculus (Math 250), Fall 2012

Commutative algebra (Math 380/500), Fall 2012

Commutative algebra (Math 381/501), Spring 2011

Toric varieties (Math 661), Fall 2010

## Earlier Teaching

Graduate course on toric varieties. Stanford. Winter 2008.

Calculus Instructor. University of Michigan. Fall 2003.

Mentor. Canada/USA Mathcamp. Summers 2002–2006.

## Conferences and Workshops Organized

Combinatorial Perspectives on Algebraic Curves and their Moduli, AMS Special Session, JMM 2024

Algebraic Geometry and Polyhedra, ICERM, April 2021

Combinatorial algebraic geometry, ICERM semester, Spring 2021

Algebraic and Tropical Online Meetings (ATOM), Summer 2020

Facets of algebraic geometry, October 2019

Graphs, graph homology, and moduli of curves, September 2019

Tropical geometry and moduli spaces, ICM Satellite Conference, August 2018

Nonarchimedean and tropical geometry, Simons Symposium, May 2017

Chip-firing and tropical curves, Graduate Summer School, MSRI, July 2016

Algebraic, tropical, and nonarchimedean analytic geometry of moduli spaces, BIRS-CMO, May 2016

Algebraic Geometry NorthEastern Series (AGNES), Yale University, April 2016

Nonarchimedean and tropical geometry, AMS Summer Institute in Algebraic Geometry, July 2015

Simons Symposium on Tropical and Nonarchimedean Analytic Geometry, February 2015

REU mini-Conference, Yale University July 2014

Workshop on Algebraic Foundations for Tropical Geometry, Yale University, May 2014

Specialization of Linear Series for Algebraic and Tropical Curves, BIRS, April 2014

AMS MRC Workshop on Tropical and Nonarchimedean Analytic Geometry, June 2013

Algebraic Geometry North-East Series (AGNES), April 2013

Simons Symposium on Tropical and Nonarchimedean Analytic Geometry, April 2013

AIM workshop on Implementing Algorithms in Macaulay 2, October 2009

Workshop on Moduli Spaces of Curves and Gromov-Witten Theory, U. Michigan, April 2006