# PUMA: (P)racticum for (U)ndergraduate (MA)thematicians in Combinatorics

April 13-14, 2024



## **Scientific Overview**

"PUMA: Practicum for Undergraduate MAthematicians" is a series of 2day intensive programs which will showcase a specific mathematical sciences research area.

This PUMA event, on Saturday April 13 and Sunday April 14, 2024, will feature topics in combinatorics. A goal of this program is to expose Southern California students historically underrepresented in STEM (such as women and historically marginalized minorities) to the beauty of the subject.

The Practicum is introductory in nature and no prior discrete math or combinatorics coursework will be assumed. Students should be familiar with calculus and linear algebra, although this is not required. PUMA is designed for students who have completed minimal coursework in upper-division mathematics courses.

- Tutorials: Three lectures over two days to introduce topics in Matroid theory.
- Problem Sessions: Two graduate students will coordinate a series of three hour-long group-work sessions where students will work on problems meant to supplement the tutorials.
- Expository Talks: Four experts will give one-hour introductory presentations on various combinatorial topics.
- Professional Development Sessions: We will hold two hour-long workshops on REUs, CVs, requesting letters of recommendation, etc.

There is no registration cost associated with this program.

# **Organizers**

Anastasia Chavez (Saint Mary's College of California) Andrés Vindas-Meléndez (UC Berkeley & Harvey Mudd College)

# **Speakers and TAs**

## **Tutorial Speakers:**

Anastasia Chavez (Saint Mary's College of California), Andrés Vindas-Meléndez (UC Berkeley & Harvey Mudd College)

### **Expository Speakers:**

José Mijares-Palacios (CSU Los Angeles), Max Hlavacek (Pomona College), Emily Heath (Iowa State), Bennet Goeckner (University of San Diego)

### **Graduate TAs:**

Lucy Martinez (Rutgers University)
Mont Cordero (University of Washington)





