



23rd Annual BAMO Awards

Santa Clara University

March 20, 2022

- 2:30 Introduction
- 2:45 “The changing nature of proof”

Alon Amit, Intuit

Proofs are the essence of mathematical progress. The nature of “proof” has been relatively stable for millennia, but is now changing due to a confluence of two factors: the increasing complexity and specialization of mathematical research, and the emergence of proof assistants and computer-verified proofs. We will explore those developments and study the possible role of Lean for the near future of mathematical progress.

- 3:45 Presentation of awards

About BAMO



- **The Bay Area Mathematical Olympiad (BAMO)** is an annual contest for middle and high school students. The first high school contest was held on February 23, 1999. The 23rd annual BAMO took place on March 2, 2022. The BAMO competition tests students' problem-solving skill, stamina, and creativity.
- **BAMO is made possible** by generous gifts from Tom Davis and Ellyn Bush, Peggy and Tom Rike, the support of the Mathematical Sciences Research Institute, and numerous donations from private individuals.
- **BAMO Organizing Committee:** Zvezdelina Stankova, UC Berkeley; Paul Zeitz, University of San Francisco; Austin Shapiro, Proof School.
- **BAMO Problems Committee:** Austin Shapiro, Tom Davis, Ellen Kulinsky, Daniel Rostamloo, Nikhil Sahoo, Elysée Egolf-Wilson.

About BAMO



- **BAMO Grading Committee:** Austin Shapiro, Paul Zeitz, Zvezdelina Stankova, Daniel Rostamloo, Ted Alper, Saud Molaib, Elysée Wilson-Egolf, Colby Brown, Aaron Agulnick, Aaron Zaks, Cody Strouse, Daniel O'Connor, David Gonzalez, Ellen Kulinsky, Erik Herrera, Felicia Lim, Kyle Devereaux, Louis Ng, Mátyás Sustik, Regina Zhou, Ryan Quan, Tom Davis, Yashwanth Rao Venapally, Appilineni Kushal
- We thank:
 - Austin Shapiro, Ellen Kulinsky, Joshua Zucker, Paul Zeitz, and Sam Vandervelde for problem contributions;
 - The UC Berkeley mathematics department for providing meeting space for the grading of BAMO;
 - Professors Frank Farris and Howard Levinson of the Santa Clara University mathematics department for generously hosting both a satellite site for the BAMO exam and especially, this awards ceremony;
 - Tom Davis, for the T-shirt design!

Our speaker



Alon Amit is an entrepreneur, executive and occasional mathematical educator. He has developed and managed products at Google, Facebook, and now Intuit following the acquisition of Origami Logic, a startup he co-founded in 2012. Alon holds a Ph.D. in mathematics from the Hebrew University, Jerusalem, serves on the Board of Trustees of Proof School, and frequently teaches at Math Circles across the Bay Area.



Alon joins a very distinguished list of speakers, which includes Arthur Benjamin, Melanie Wood, and the late John Conway. See <https://www.bamo.org/archives/speakers/> for more information.