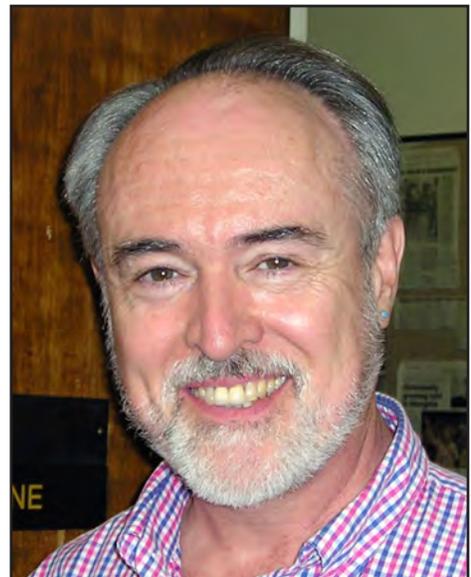# Frank A. Farris

Picturing Complex Numbers

Santa Clara University, Daly Science 207
Wednesday, March 14, 7:30 pm

When we introduce a special number *i* so that $i^2 = -1$, we create a whole new number system called the complex numbers. It's as if this is a new world, giving us new space to play. This talk describes some well-known ways to picture complex numbers, as well as a relatively new method, where color plays a role. Visualizations range from something as simple as the squaring function to infinitely complicated non-Euclidean wallpapers.

Frank A. Farris has taught in the Department of Mathematics and Computer Science at Santa Clara University since 1984. His research involves geometry, visualization, and expository mathematics. From 2001–2005 and again in 2009, Farris was Editor of Mathematics Magazine. In 2012, he served as Benedict Distinguished Visiting Professor at Carleton College.
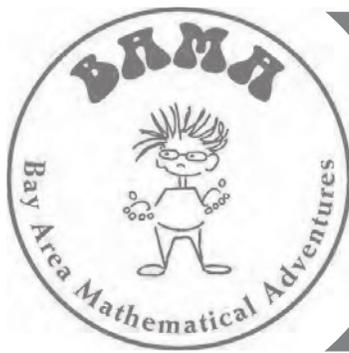
A native Californian, Farris did his undergraduate work at Pomona College and received his Ph.D. from M.I.T. in 1981. Awards include a Trevor Evans Award for his article "The Edge of the Universe" in Math Horizons and the David E. Logothetti Teaching Award at Santa Clara University. Farris is also a singer, who has portrayed on stage almost all of the dim but endearing tenors in the light operas of Gilbert and Sullivan.

* See back for map and directions.

Visit the Bay Area Mathematical Adventures (BAMA) at http://mathematicaladventures.org

To receive email notifications about BAMA talks, please contact Frank Farris at ffarris@scu.edu .

BAMA
Bay Area Mathematical Adventures

A series of presentations on diverse topics by remarkable mathematicians. All talks are free and open to the public.

WHY?
BAMA aims to challenge and motivate students to think mathematically. Speakers will present real mathematics, and will share with the audience modern views of mathematics. Some talks will provide students with related problems, or will enable teachers to expand later on the topics with their students.

WHO?
BAMA is aimed at bright high-school age students. However, all are welcome: younger or older students, teachers, parents, and the general public.

WHEN?
Evening talks will be given approximately once a month between September and April. Each talk will be self-contained (speakers will not assume their audiences have attended previous talks).
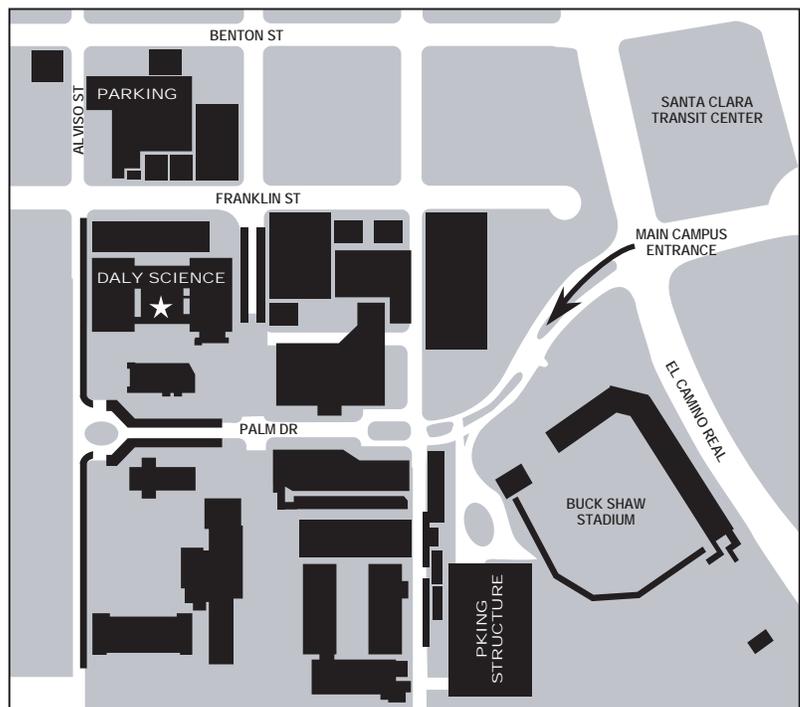
WHERE?

Santa Clara University
Daly Science, rm. 207

■ From US Highway 101, take the De La Cruz Blvd/Santa Clara exit and follow the signs to El Camino Real and the main campus entrance.

■ From I-280, take I-880 north toward Oakland to The Alameda exit. Turn left onto The Alameda (which becomes El Camino Real) to the main campus entrance.

■ From I-880, take The Alameda exit, travel north (The Alameda becomes El Camino Real) to the main campus entrance.

Note: If you bring your car to a talk at SCU, use the formal entrance to the University and tell the parking guard that you are attending a BAMA talk, you will get a **free permit**, which you can use in the parking garage or in the lot on Franklin Street, which is closer to the talk location.

■ If you have a disability and require reasonable accommodation, please call anyone on the steering committee, or 1 800 735 2929 (TTY - California Relay) 24 hours in advance.

FOR MORE INFO:

http://www.mathematicaladventures.org

BAMA Steering Committee:
Tatiana Shubin	SJSU	408-924-5146
Frank Farris	SCU	408-554-4430
Bradley Jackson	SJSU	408-924-5100
Gerald L. Alexanderson	SCU	408-554-6894