

BAMA

School Year 2019—2020
Join us for a free talk...

3

Carl Pomerance

The First Function



Santa Clara University, Daly Science 207

Friday, January 31, 2020, 7:30 pm

For a natural number n , let $s(n)$ denote the sum of the positive divisors of n that are smaller than n . Introduced by Pythagoras 2500 years ago, it is perhaps the first function ever studied. Some of the problems connected with $s(n)$ are among the most famous and attractive in mathematics.

Here is an example. Starting with the number 276, compute $s(276)$, it is 396. Then compute $s(396)$, etc., that is, keep applying s to the current number to get the next one. Does this sequence tend to infinity, does it enter a cycle, or does it end at 0? No one knows!

Study of problems such as this one has led to advances in a number of areas, including probabilistic number theory and computational number theory.

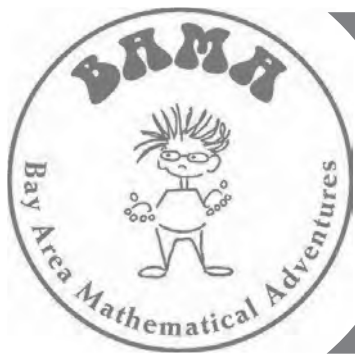
Carl Pomerance received his B.A. from Brown University in 1966 and his Ph.D. from Harvard University in 1972 under the direction of John Tate. Currently he is the John G. Kemeny Parents Professor Emeritus at Dartmouth College, after previous positions at the University of Georgia and Bell Labs. A number theorist, Pomerance specializes in analytic, combinatorial, and computational number theory, with applications in the field of cryptology. He considers the late Paul Erdős as his greatest influence.



* 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

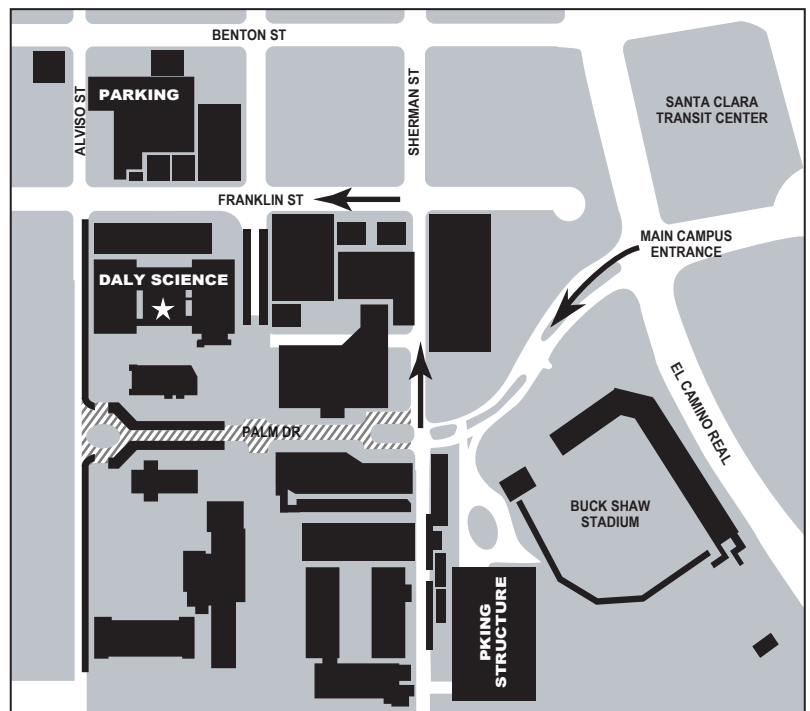
From US Highway 101, take the De La Cruz Blvd/Santa Clara exit and follow the signs to El Camino real and main campus entrance.

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

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

Note: If you arrive by car, you can go directly to the parking garage at Franklin and Alviso and purchase a permit at a self-serve kiosk. Alternatively, it is usually possible to find free street parking within a couple of blocks. The parking garage is free after 7 pm on Fridays.

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.



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<http://www.mathematicaladventures.org>

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