Pi Mu Epsilon/Mathematical Association of America

Math Club Meeting

Taxicabs and Sums of Two Cubes: An Excursion in Number Theory

by

Joe Silverman

WHEN: **Wednesday, November 3, 2021**, 5:30 PM

WHERE: MSCS 101

WHO: All are welcome!

WHAT: Some numbers, such as

$$9 = 1^3 + 2^3 \text{ and } 370 = 3^3 + 7^3,$$

can be written as a sum of two cubes. Are there numbers that can be written as a sum of two cubes in two (or more) essentially different ways? This elementary question will lead us into beautiful areas of mathematics where number theory, geometry, and algebra interact in surprising ways. And there will be taxis and internet security, too! (This talk requires only high school math and is accessible to undergraduates at all levels.)

INFO: Contact Club Advisor Dr. Mermin:
mermin@math.okstate.edu.