



The Math Colloquium
Department of Mathematics
San José State University



Everett Howe

Center for Communications Research (La Jolla)

Sums of harmonic integers

FEBRUARY 2, 2011, MH320

Abstract: Let us say that an integer is *harmonic* if its absolute value is a power of 2 times a power of 3. Can 4985 be written as the sum of three harmonic integers? (The question would be much easier to answer if we didn't allow negative summands!)

I will explain the significance of this problem, trace its origin back to the 14th century, and give a simple solution. I'll also describe some other recent results about sums of harmonic integers.

Background: Students should be comfortable with computations using the integers modulo n . It might also be helpful to know what a group is.

About the speaker: Everett Howe received his Ph.D. from UC Berkeley in 1993. After a post-doctoral position at the University of Michigan, he began working as a researcher at the Center for Communications Research in San Diego, where he remains to this day.

SNACKS IN MH331B AT 2:30 PM

TALK STARTS AT 3 PM

For more information, see our full schedule at:

<http://www.math.sjsu.edu/~hsu/colloq/>