

MANY CHEERFUL FACTS

presents

Eureka: The Method of Archimedes

a talk by Noah Snyder

13:10 – 14:00 on Thursday, November 29, in room 1015.

I'm sure you all have heard the story of how Archimedes proved the King's crown was a forgery by running naked through the streets. However, you've probably heard the wrong story for how exactly he did this. Archimedes also managed to find the volume of the sphere, which was quite a feat in the days before calculus. For a long time we didn't know just how he did these things, but recently one of his paper's was rediscovered giving new insight. I'll explain how we now think Archimedes really did stuff.

*I am the very model of a modern Major General,
I've information vegetable, animal, and mineral,
I know the kings of England, and I quote the fights historical
From Marathon to Waterloo, in order categorical;
I'm very well acquainted, too, with matters mathematical,
I understand equations, both the simple and quadratical,
About binomial theorem I'm teeming with a lot o' news,
With many cheerful facts about the square of the hypotenuse!*

— Gilbert & Sullivan, *P o P*

The website for Many Cheerful Facts is
<http://www.math.berkeley.edu/~mcf>