

COLORADO

# CAFÉ SCIENTIFIQUE

TUESDAY 21 MARCH 2006

at the Wynkoop Brewing Company

<http://www.wynkoop.com/>

Corner of 18<sup>th</sup> and Wynkoop in LoDo, Denver

About a block from Light Rail. Thirteen minutes by foot from Auraria.

## **–PRODUCED BY BEAUTIFUL MINDS?–**

*Mathematics research: What it is, what's the Next Big Thing, and why you should care*

**Gene Abrams, Department of Mathematics, University of Colorado at Colorado Springs,  
President's Teaching Scholar**

Math research is pretty esoteric, but it's not all beyond the comprehension of people who don't use the kind of pens that require pocket protectors. There is a lot of everyday interest in math: Fermat's last theorem, Goldbach conjectures, Numb3rs, Good Will Hunting, Sudoku... Gene Abrams kind of looks like the guy on Numb3rs, actually, though he is a real professor of mathematics at the University of Colorado at Colorado Springs. He has a long list of teaching awards, and although his research is totally abstruse ( $C^*$ -analysis and Leavitt Path algebras), he is also very much involved in K-12 mathematics and was one of the developers of UCCS's Mathonline program. He'll start by giving us some history of math research, from Euclid to Hilbert, and talk about current "outstanding" problems—some with huge prizes waiting for the first solver—and places where pure math has had direct recent payoffs in applications (e.g. secure data transmission, encryption, fingerprint analysis). Haven't you always wanted to know why every even number is the sum of two primes? Or even what that means? This is your chance: **Math with beers instead of tears.**

***EVERYONE IS WELCOME.*** The discussion starts at **6:30** in the Mercantile Room (no food service there). Come before **6 PM** to leave yourself time to get something to eat, or stay and eat afterwards. We end around **8 PM**.

There's no charge. The Wynkoop is generously providing the facility; we buy our own food and drinks. It will be first come, first seated, and **seating is limited** so that everyone who wants to can be part of the discussion.

The Colorado Café Scientifique is organized by an informal group of President's Teaching Scholars and faculty from CU and institutions up and down the Front Range, as well as science fans from industry, government and elsewhere. We welcome your input, including ideas for speakers and topics. Bring them with you to the next Café, or e-mail them and any questions to [John.Cohen@UCHSC.edu](mailto:John.Cohen@UCHSC.edu)

**Essential information and many excellent Math references (Quiz!) on our Web site at <http://CafeSciColorado.org>**