

ABGN #7

Adam's Bimonthly Grad Newsletter

Home

After finals, I took a few weeks to come home. Cookout is a godsend. I hit lots of my old haunts, and got to see some familiar faces. Thanks to those who reached out!



The old crew + some of my family

Visiting Family

The family (minus Ike) spent a week in Iowa/Minnesota to attend Aunt Linda's 70th birthday party. We played lots of cards, drank homemade wine, blew bubbles, and otherwise caught up. I learned Hearts.

Later in my vacation, I spent a week at Sunset Beach with the Kunesh side of the family. The waves weren't bad. Hanging out on a (nearly) empty beach once the sun-soakers left was especially rejuvenating.



Left+Center: highlights, Iowa/Minnesota trip. Right: Surf day at Sunset Beach

Summer (at) School

I'm TA'ing Davis's Summer Session II. PHY 7A's on the plate. I've taught it a few times before; it's "energy for bioscience," essentially.

At the edges I've been taking trips around CA, hanging out with friends, improving my Smash game, and otherwise keeping busy. It's nice to have a relaxed daily rhythm.

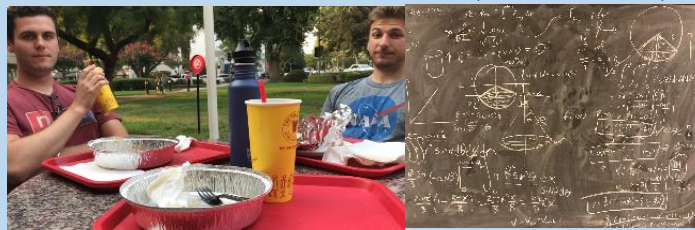


Hard Summer 2018

Looking forward

I'm moving in to my new place on Wednesday! It's just a little north of where I am now, but still solidly in Davis. I'm moving in with the two guys below, plus Andrew (not pictured). I'm anticipating Smash, parties, and good food.

The other demon looming over the horizon is the Preliminary Exam, spanning 12 hours over Sept. 18-21. It's supposed to test my physics and math knowledge, and determines whether or not I advance. (Adam, MSc?)



Left: Jonathan Minnick (left) and David Grzan (right) at Halal Guys

Right: Blackboard with a prelim question

UCD Physics
Banner

"What's a Green's Function?"

UC DAVIS
DEPARTMENT OF PHYSICS

All Hail Cutter

Cutter First Year Summary v3.pdf

Now including a "cheat sheet" with all corrections and additions, mostly to the C...

2000 Prelim

1. Consider the vector field $\mathbf{F}(x, y, z) = (x^2 + y^2, xz, yz)$ in a rectangular volume V bounded by the planes $x=0, x=1, y=0, y=1, z=0, z=1$. Compute the flux of \mathbf{F} through the surface of V .

2. Consider the differential operator \mathcal{L} where $\mathcal{L}u = \nabla^2 u + u$ in the rectangular region $R = [0, \pi] \times [0, \pi]$. Find the Green's function $G(x, y; x', y')$ for \mathcal{L} in R .

3. Consider a uniform distribution of positive charges of volume density ρ in the region V bounded by the planes $x=0, x=1, y=0, y=1, z=0, z=1$. Compute the electric field \mathbf{E} at the point $(1/2, 1/2, 1/2)$.

4. Consider the function $f(x) = \sin(x)$ on the interval $[0, \pi]$. Compute the Fourier series expansion of $f(x)$.

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Summer
2018

"Will Adam pass his prelim? Tune in next time to find out!"

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