Spring 2017 Creations

ODE to Legendre Polynomials

By Ryan Tamburrino

O, Ye banal Laplacian conversion With work simply clerical To get me to the land Of the coordinates spherical An unsung azimuthal miracle Birthed this divine Legendre lyrical!

Your role non-trivial, when multi-pole was the goal Initially sparking Legendre magic in my soul,

Over Bessel, Laguerre, Whittaker and Hermite, O Legendre, thy polynomials are all I can think About, laying my weary head down at night.

As is often the case, avoid the French temptation! Because there's physics to do - it waits for no man! Not even those who distinguish chopin' from Chopin.

Even or odd, I love them all the same And in my darkest hours I'll remember thy names 'Twas THEE who hath shown me the world in a new light No PDE can take me down without an ODE fight.

Direct me Dirac!

By David Roccapriore

Direct me Dirac, for I have lost my way, Distribute my functions so I can say, That you are a Delta, so tall and proud, An idealized pillar to stand out in the crowd.

You're not a real function, but that's okay, Cause abstraction has never led me astray, And in terms of practice there is much to gain, Like impulses, signaling.. and the spike train.

The semester is over and I'm going away, But forever in my mind shall delta stay, Because though math methods has come and gone, There is much I must do to model the neuron....

Hermite the Hermit

By Leo Kell

Hermite the Hermit Said to his friend Herr Kermit You can do physics! -you just need to learn it (And you don't need a permit)

A necessary evil

By Abby Kaplan

When I am faced with an equation That is non-linear and thus, complicated I feel the dread begin to set in; Tonight, sleep will not be awaited. My hands shake as I type the commands And cautiously press shift and enter. Inevitably, on my screen Mathematics understands. Strange red messages appear, twelve errors all in the center Solutions, plots, and slope fields nowhere to be found. My despair grows as countless googling fails to hack it. Unlike the equations my sadness knows no bound When finally, late at night, I find the missing bracket.

A poem

by Kevin Carey

Elliptic integral, elliptic integral, Are you many so cryptic and formidable? Helped me find the arc length of orbits Oh how they move, you've let me absorb it