FUN: The Fundamental Equation of Space-Time

By Woody Stanford (c) 2016

One of the interesting ideas to come out of our EXPER work is a vector field based theorem that we believe has the potential to explain the true nature of space-time.

We are proposing to start an new series of simulations with FEM techniques, 2D with membrane (amplitude forming a Gaussian surface) that we believe will illustrate “behaviors” paralleling that of 3D space complete with time-dependence.

It starts with the assumption that if you understand one point in time and space completely and utterly, that you have explained every other point in space.

Our theorem when expressed in fast C/C++ code works like a rubber sheet, only instead of placing planets or bowling balls on it, we shrink it down to QM levels.

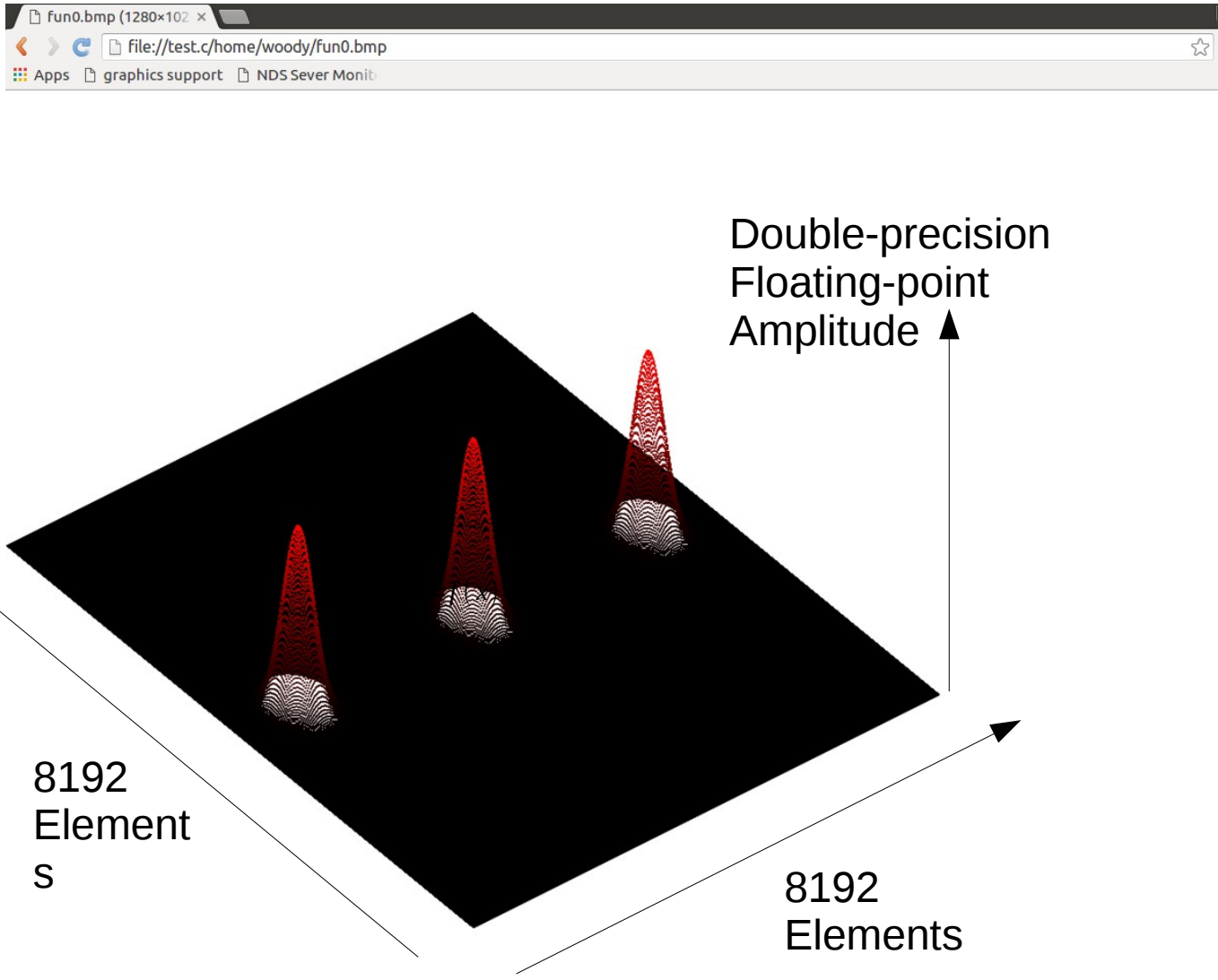
As many of you know we are actively working on a grand unification approach to understanding quantum mechanics, primarily in the area of nucleons and the W boson, using spacial curvature as the media upon which we model our particles.

We anticipate having a Higgs model candidate after we have worked on understanding the W Boson.

It works like a bunch of dowels with springs attached that make the sheet want to return to neutral curvature. The force these springs exert introduce the T variable which can be iterated into an animation that we hope will produce photon-like waves and small masses of intermediate particles.

FUN Amplitude Plot (2D + Membrane)
Screen-shots from the fundamental equation of space-time series of simulations/experiments.

2D Amplitude FEM Array



$$\lambda = f(x) = k\,E^{-kx^2} = \frac{1}{\sigma\sqrt{2\pi}}\,E^{\frac{-x^2}{2\sigma^2}}$$

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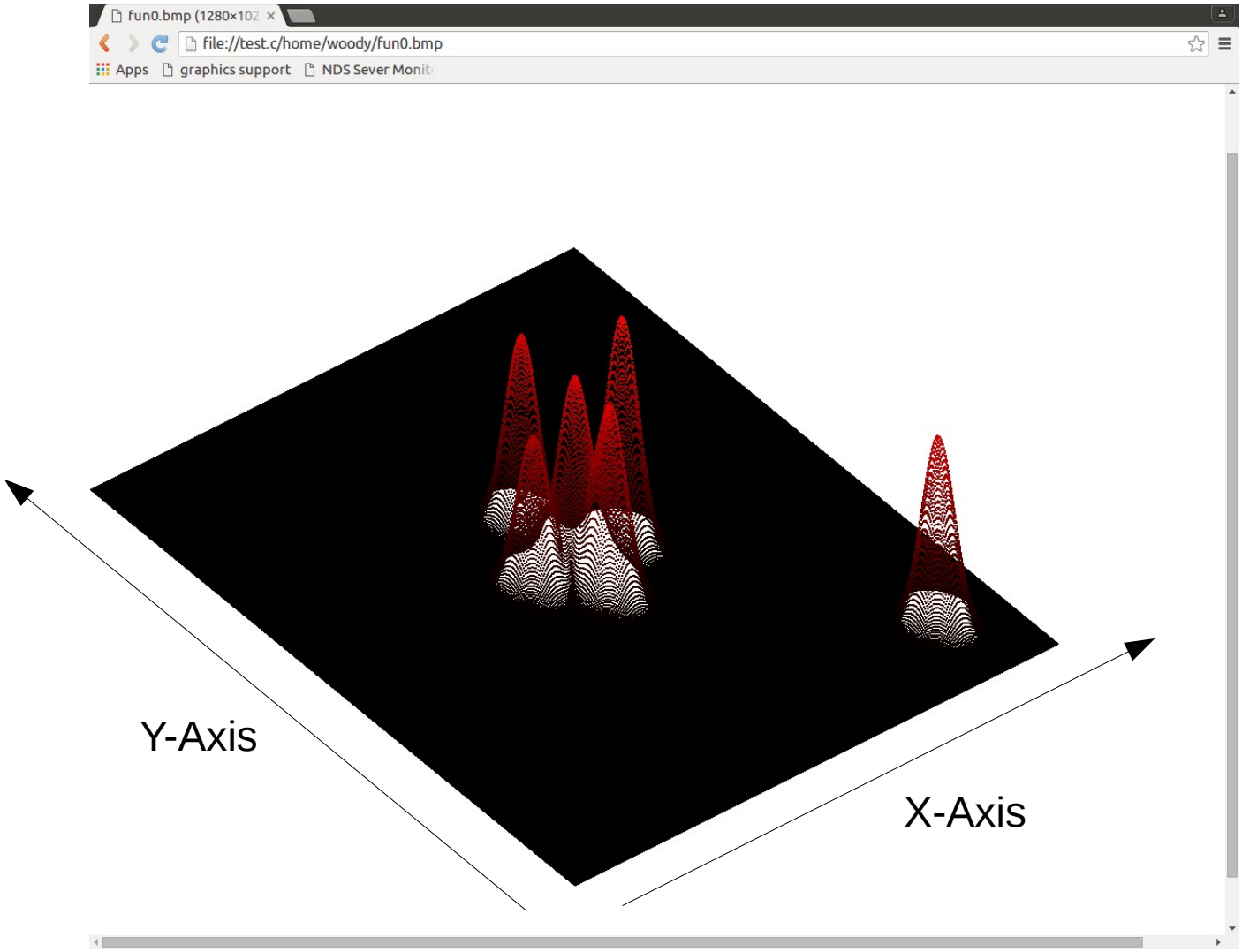
Initial Condition Generator



Our “initial condition generator” puts an asymmetrical node of positive mass (indicated by amplitude) at the center of the simulator's FEM array. Our prediction is that when we install our vector field engine that it will collapse/”blow” towards the left.

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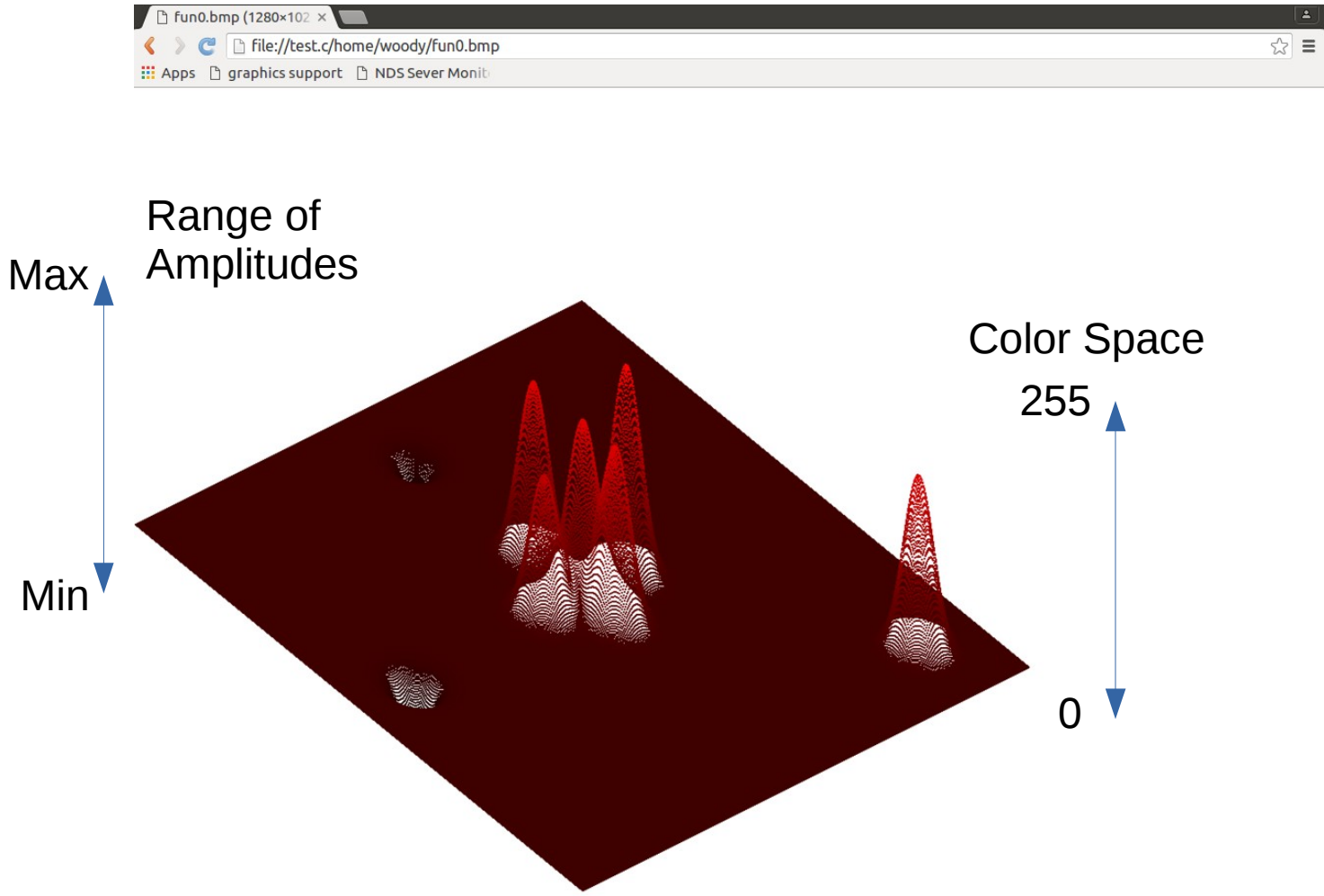
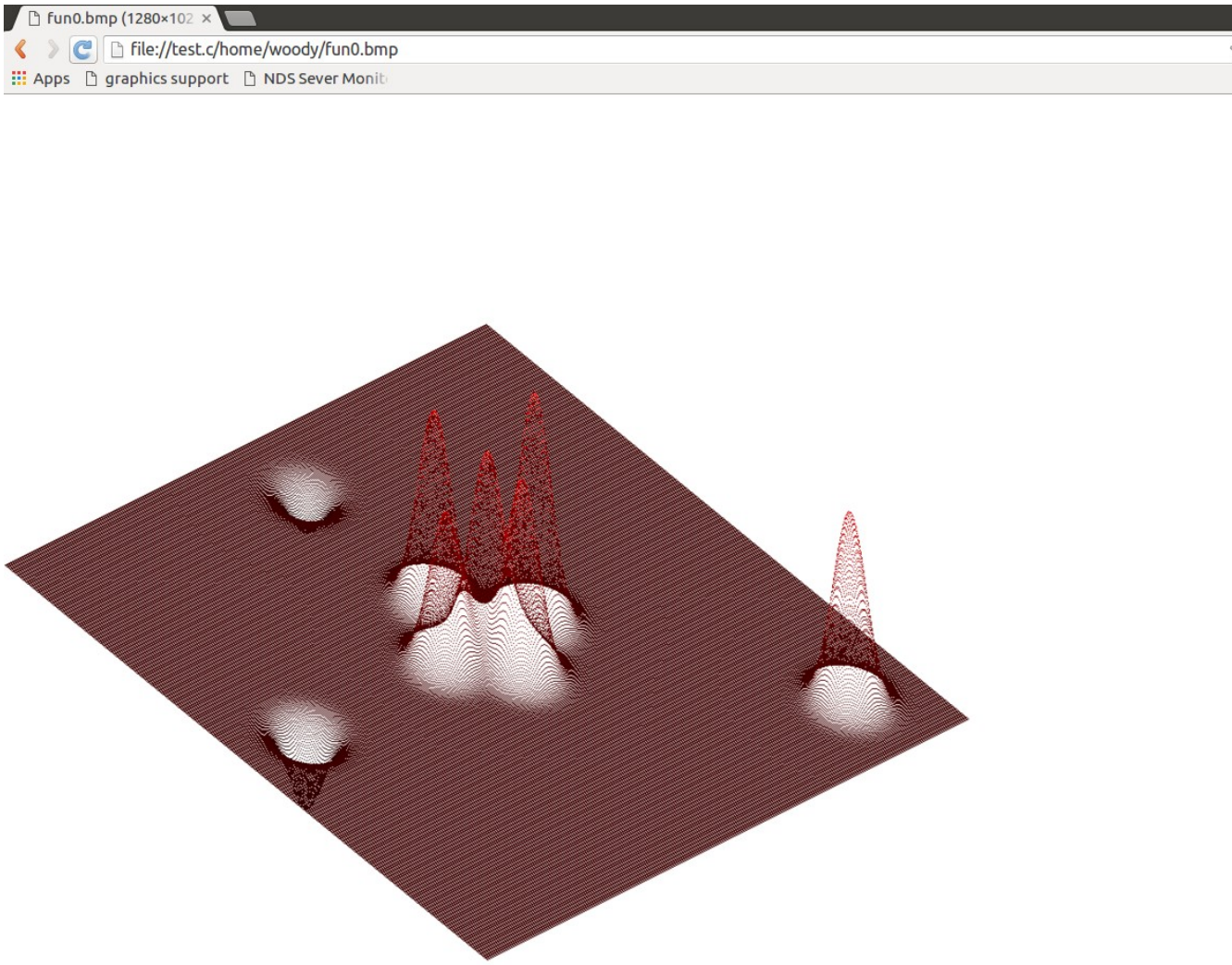
Color Space



Notice how our 256-color space takes into consideration the maximum and minimum such that its evenly spread over the range of amplitudes such that the minimum is black and maximum is pure red.

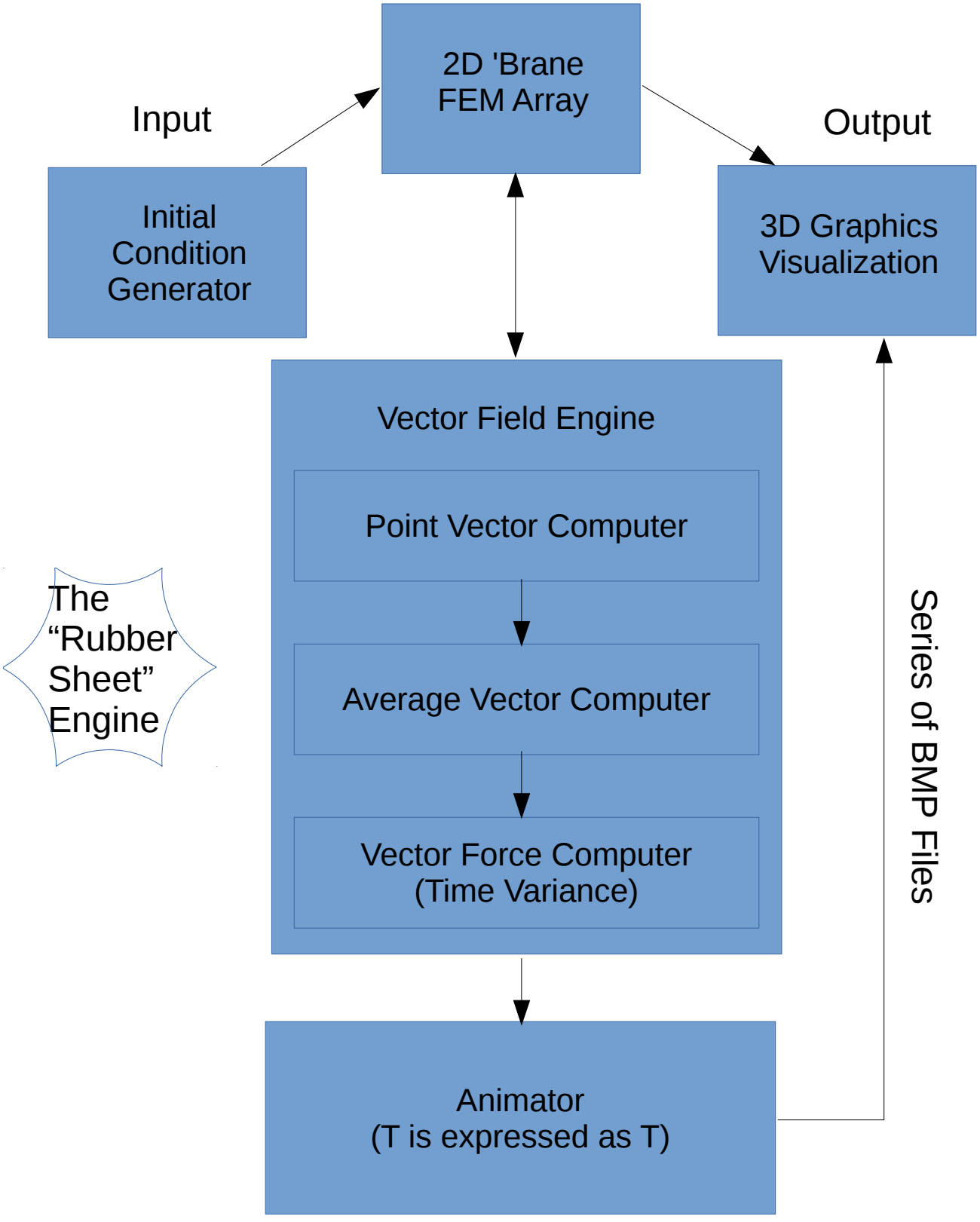
FUN Amplitude Plot (2D + Membrane)
Screen-shots from the fundamental equation of space-time series of simulations/experiments.

Transparancy



The display isn't as attractive with this feature turned on, but we've noticed we can see the areas of negative mass better with transparancy. To enable merely activate the putpixel code and comment out the bar2 code in the plot_fem function..

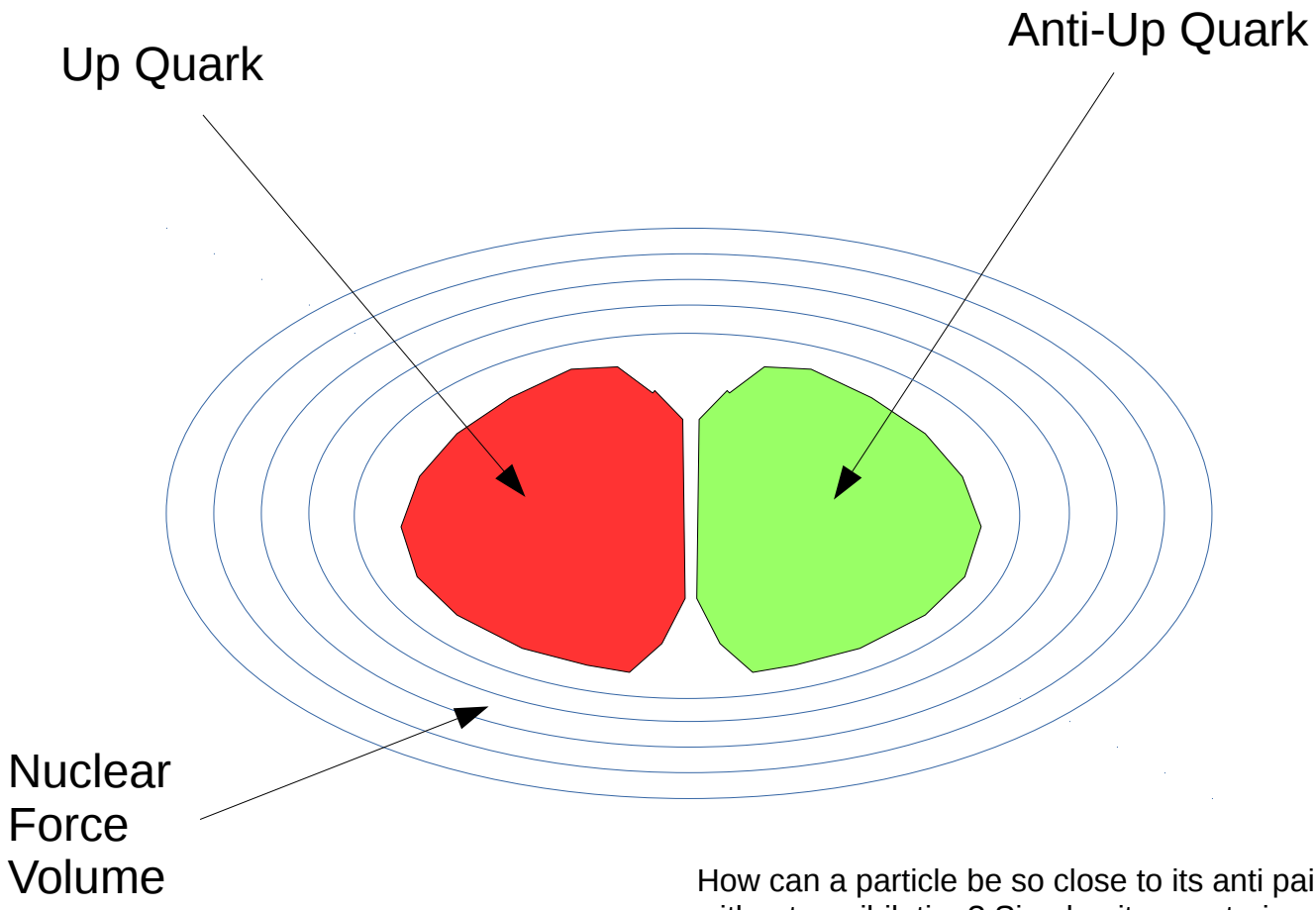
Block Diagram of FUN Simulator



Prediction: the PI Meson (positive mass shown in red and negative mass shown in green) with a mass and size 1/√2 of that of two up quarks.

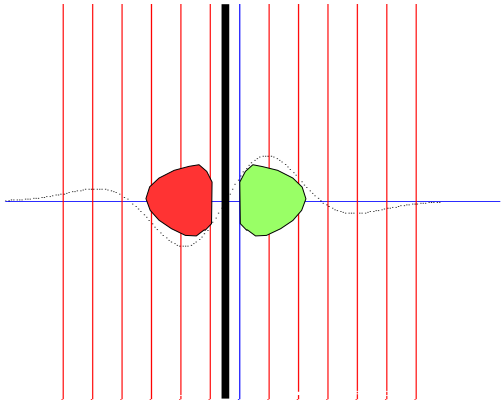
Wave function:

$$\psi = f(x) = \frac{d^3 k E^{-kx^2}}{dx^3}$$



We are hoping to see analogs of intermediate particles like this on simulation. Ambitious, we know, but hoping (fingers crossed).

How can a particle be so close to its anti pair without annihilation? Simple...its constrained by the 3rd derivative of its E wave function.



In conclusion...

As of today's date we have the FEM Array, the initial condition generator and the graphic support all coded.

If you want to assist in any way, or want to be apprised of work in this area, please feel free to contact us through the Stanford Systems web site at http://woodystanford.wordpress.com.

We are projecting this to take months before any concludive findings. Hopefully we see some 2D versions of photons, neutrinos, mesons and even protons and electrons coming out of our FEM models.