

Thanks for all the hard work #204

A tribute to Paul Falstad.



VINYASI

JUN 14, 2026

Just wanted to say how appreciative of your hard work I am. I was just reading through your work on pong and it finally hit me how privileged I am to have access to so much amazing content.

Thank you!

[comment by [metamaterialsuit](#)]

I agree. Paul has done a superb job of improving the consistency of his simulator to uphold the principles of the Conservation of Energy making it increasingly difficult to achieve overunity which means that his idealistic coils and capacitors are harder to “fool” into giving false positives of more output than input.

But at the same time, his unique simulator has made it very easy for me to learn basic principles, such as: targeting the resonant parameters of a doubled tank circuit (of pairs of caps and pairs of coils) so as to achieve results which are unparalleled and unprecedented in contrast to merely using a simplistic LRC tank circuit concept in which only one type of each parameter is utilized (one cap and one coil) along with correcting the mistake of *not* using a resonant frequency which is parasitic for that circuit’s topology.

For instance ...

I've learned how targeting the resonance of a tank circuit (of pairs of coils and pairs of caps) to the frequency of the parasitic oscillation for that circuit can make all the difference in producing overunity. This is in contrast to using any other frequency coupled with a single capacitor and a single coil.

This awareness (of what could resonate with a parasitic frequency) was only achieved *after* experimenting with the alteration of the simulator's time-step reducing the time-interval (by trial and error) to determine what impedances should be used to parasitically resonate with the pairs of caps and the pairs of coils.

This elevated resonant parasitic frequency (of 38.6 Giga Hertz) is used instead of using the original slower frequency (of 1.4 kilo Hertz) which demanded a severely reduced time-step (of 26 pico seconds or less) to make up the difference. With the elevated resonant frequency in the upper microwave range, a reduced time-step is no longer necessary.

In conclusion, it can be said of the simulator's consistent periodic time-interval that this injects a parasitic frequency into each and every circuit when simulated in this software. Whether we take advantage of this inherent feature — to serve us as a learning tool — is something else.