https://www.youtube.com/watch?v=M99TBaOe19o
Frequency characteristics of the coils. Wave resonance, part 2

Summary
There were some errors in part 1, so let's try again
we will look into coils parameters
each coil has capacitance e.g. turn to turn capacitance
even more complex situation for multilayered coils, there also layer to layer capacitance
inductance and self capacitance create multiple LC circuits
(serial and parallel)
so each coil will have multiple resonances
standing wave is separate case
what is a "sign" of standing wave – different currents at coil's ends
let's consider this test setup
use 1k in series to determine current (on the left)
use peak detector like circuit on the right to determine current on the rigth
now if we change frequency we will get a graph
red current, blue voltage
points 1, high current low voltage – serial resonance circuit
points 2, parallel resonance circuit
point 3, both current and voltage are high, standing wave
what was wrong with that setup?
1K too small, peak detector affected coil capacitance
so here new test setup
yellow current, blue voltage
sweep start 0, end 10mhz 1mhz/sec
1.7Mhz and 3.2Mhz peaks
let see smaller range
sweep start 0, end 4mhz
with previous circuit we haven't found wave resonance
now it is clearly seen
13:43 compare old (bottom) and new (top) graphs
equivalent circuit looks like this

15:27 starts non technical message