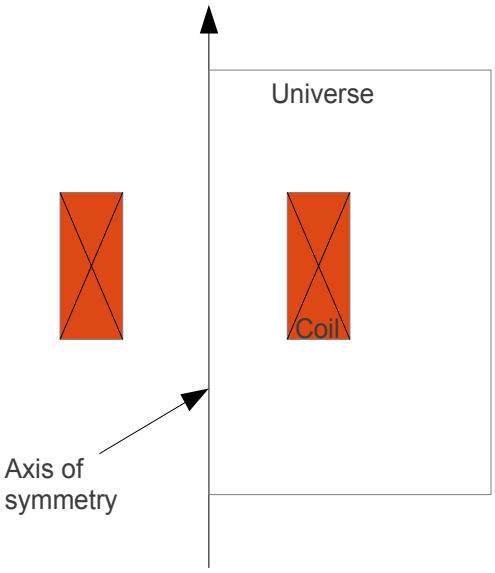
Axisymmetrical computation of a coil of a rectangular cross-section.



Computation using potential vector, A, and current density:

$$W = \pi \int_V \vec{A} . \vec{J} \, dV$$

Where V is the inductor domain (surface).

I do not get a reasonable result compare to the classical (factor of 10 difference):

$$W = \frac{\pi}{\mu_0} \int_{V_t} B^2 \, d V_t$$

Where V_t is the total surface of the model including the universe.