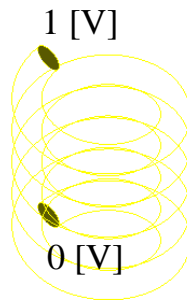


Question 8

Q: Can Femtet calculate the stray capacitance of a coil?

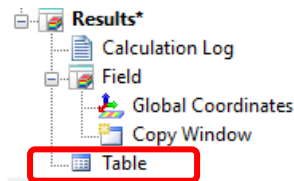
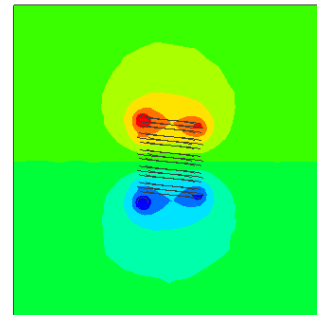
A: Yes, Femtet can do it in the electric-harmonic analysis.

- Perform the electric-harmonic analysis to calculate the floating capacitance of a coil.
- Apply a low frequency of 1 kHz to acquire a result close to that from the electric static analysis.
- Set electric potentials of 1 [V] and 0 [V] to the input and output faces of the coil respectively and set Magnetic Wall to the outer boundary condition. An air domain surrounding the coil will be automatically created without requiring manual drawing.
- The floating capacitance and resistance of the coil will be given in the electric-harmonic analysis.



Coil of Copper

Electric Potential Contour
(Cross Section View)



Table

Capacitance [F]	Resistance [ohm]	Admittance [S]	FEM Info
Electrode 1		V0	
Electrode 2		V1	
C1-2		5.405e-13	