

## Electromagnetic Proposal

The following variable names are proposed:

Voltage  
ElectricFieldX  
ElectricFieldY  
ElectricFieldZ  
MagneticFieldX  
MagneticFieldY  
MagneticFieldZ  
CurrentDensityX  
CurrentDensityY  
CurrentDensityZ  
ElectricConductivity  
LorenzForceX  
LorenzForceY  
LorenzForceZ  
JouleHeating

The following freestream variable names are proposed:

Sigma

The following nodes under the FlowEquationSet\_t node are proposed:

Name: ElectricFieldModel  
Label: EMModel\_t  
Cardinality: 0,1  
Ndims: 1  
Dimensions: LengthOfString  
Data: 'Voltage', 'Interpolated', 'Constant', 'Frozen'

Name: MagneticFieldModel  
Label: EMModel\_t  
Cardinality: 0,1  
Ndims: 1  
Dimensions: LengthOfString  
Data: 'Interpolated', 'Constant', 'Frozen'

Name: ConductivityModel  
Label: EMModel\_t  
Cardinality: 0,1  
Ndims: 1  
Dimensions: LengthOfString  
Data: 'Constant', 'Frozen', 'Equilibrium-LinRessler', 'Chemisty-LinRessler'

