



Grid integration of Linear Generators. Permanent Magnet Linear Generator Modeling using FEM software.

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Introduction

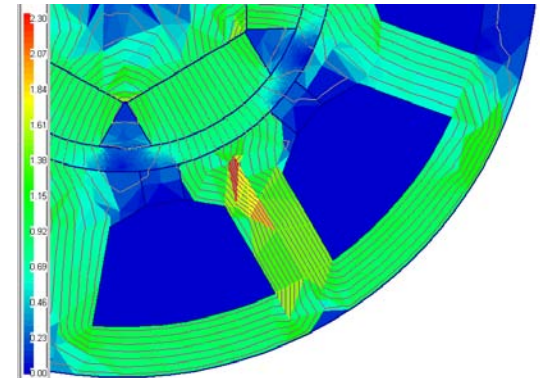
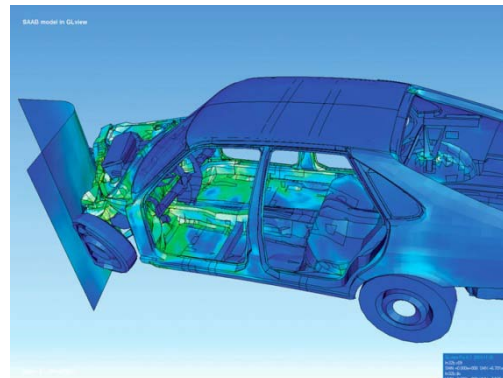
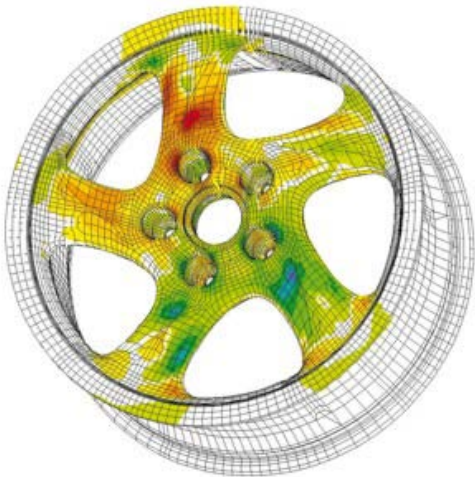


- Finite Element Method (FEM) introduction
- Permanent Magnet Linear Generator (PMLG) modelling.
- Results
- Conclusion

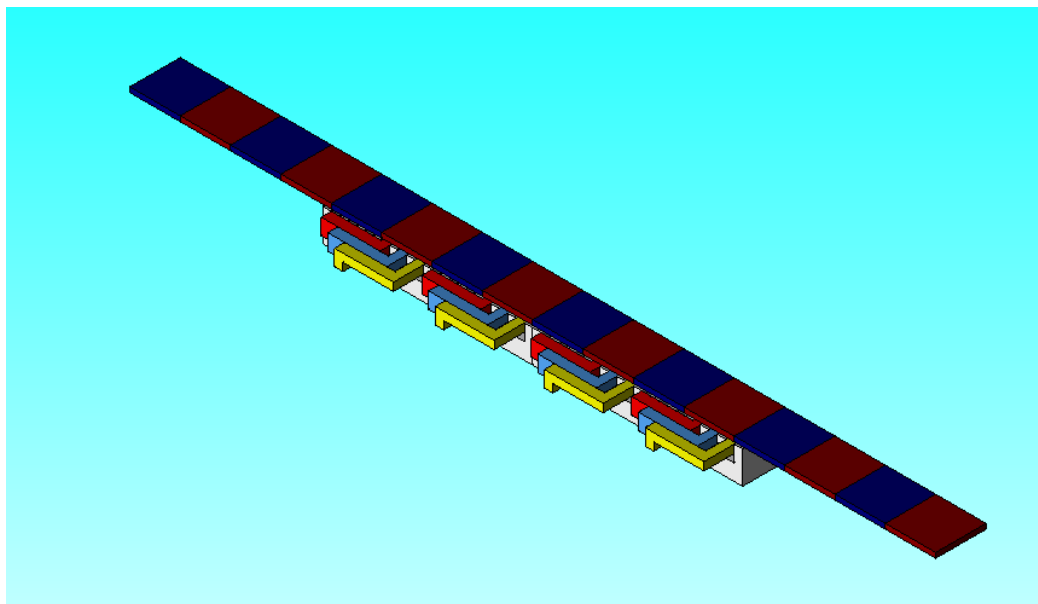
Finite Element Method



Finite Element Method (FEM) is advanced technique to test electro-magnetic devices. So far this technique is the most accurate available.

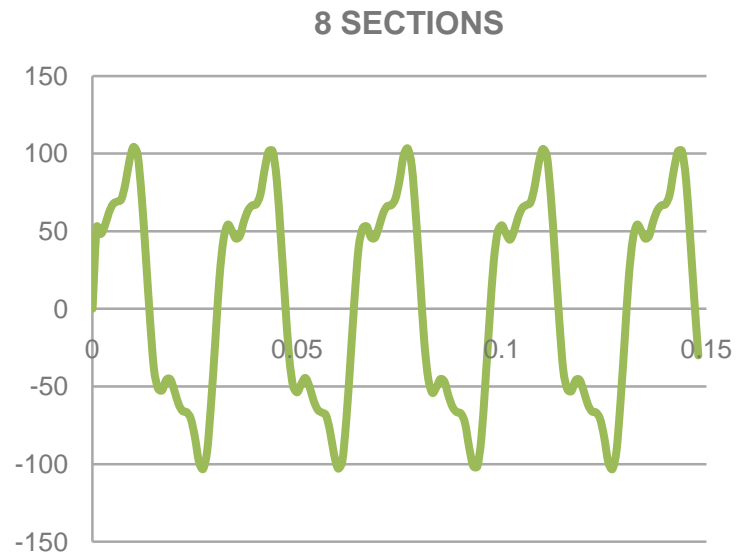
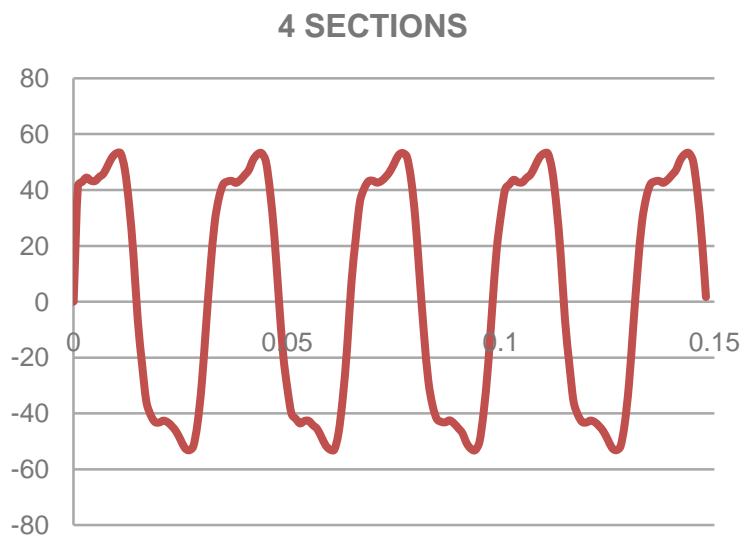


PMLG modelling



Main investigation is PMLG modelling. Physical parameters and shape is changed in order to optimal machine model creation.

Results



Conclusion



Due to NON symmetricity of magnetic fields in PMLG exact formulas for transient analysis is difficult to be developed.

Developing optimal model in 2D using FEM will be good achievement.

Once developed the model could be combined with Matlab/Simulink. Using this software connection grid integration system will be developed in the future.



Thank you for your attention.



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