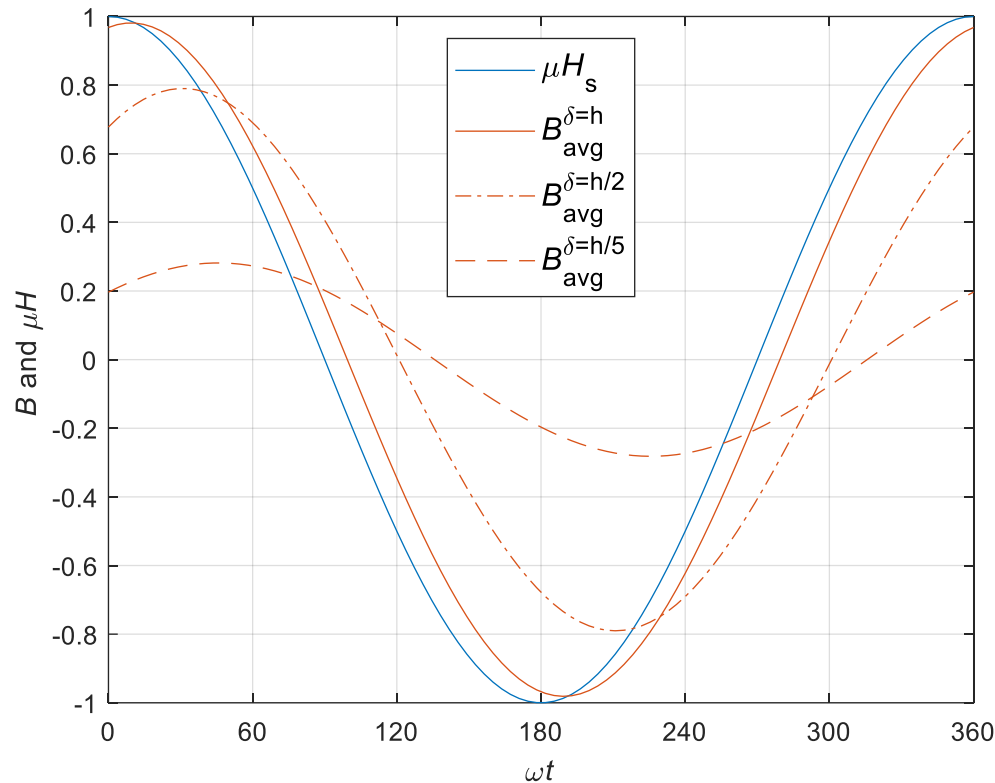


Eddy current effects in electrical steel



Average flux density across a laminate versus time at different skin depths, illustrating how both amplitude and phase of the flux is reduced, due to skin effect, at higher frequencies.

The Goal of the Project: Investigate how eddy currents in electrical steel, which are typically ignored in all finite element simulations today, affect performance of electric motors.

Expected Result:

- Quantification of the eddy current effects on fields at typical operation of automotive (high speed) motors.
- Simulation methods that include eddy current effects in flux calculations
- Verification and tuning of simulation methods through comparison between simulation and measured behaviour of electrical steel.

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