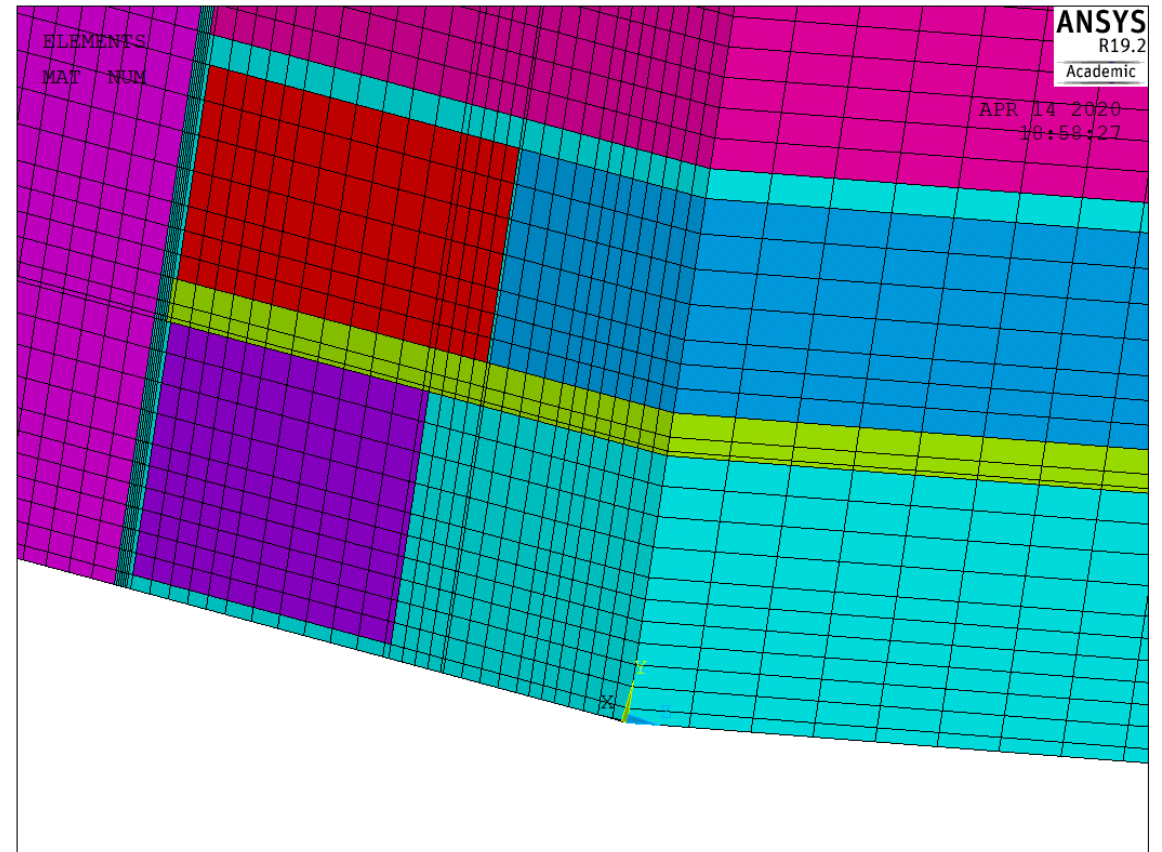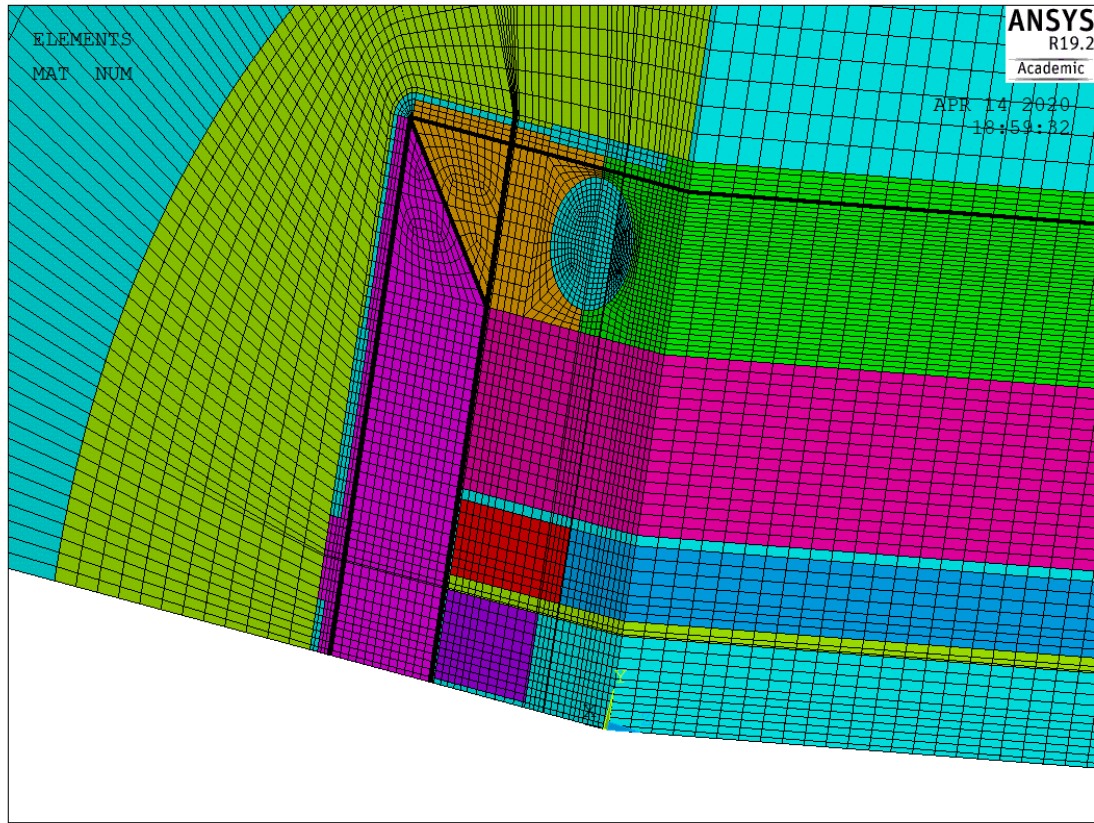# Eddy currents analysis @ quench (Steel shell)

P. Testoni

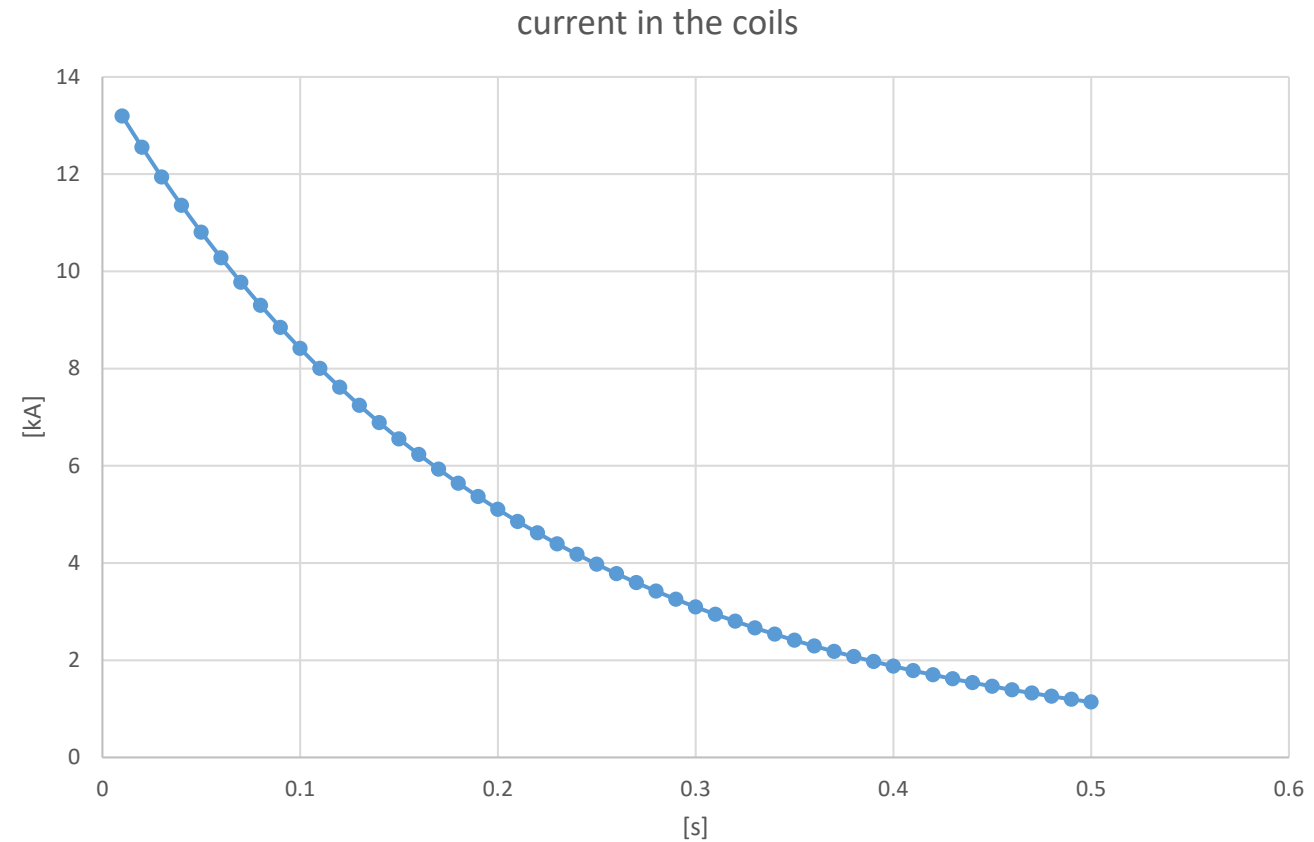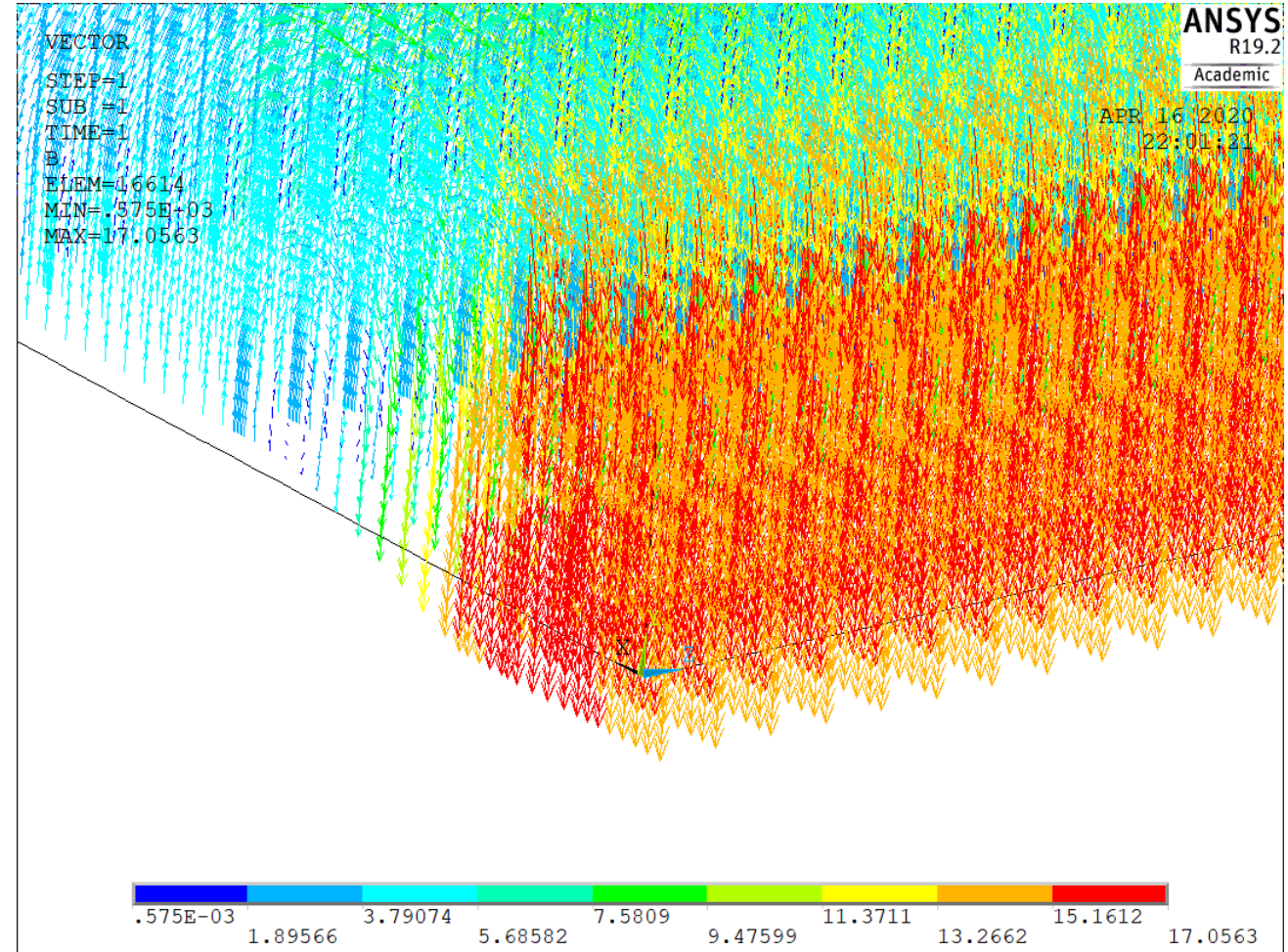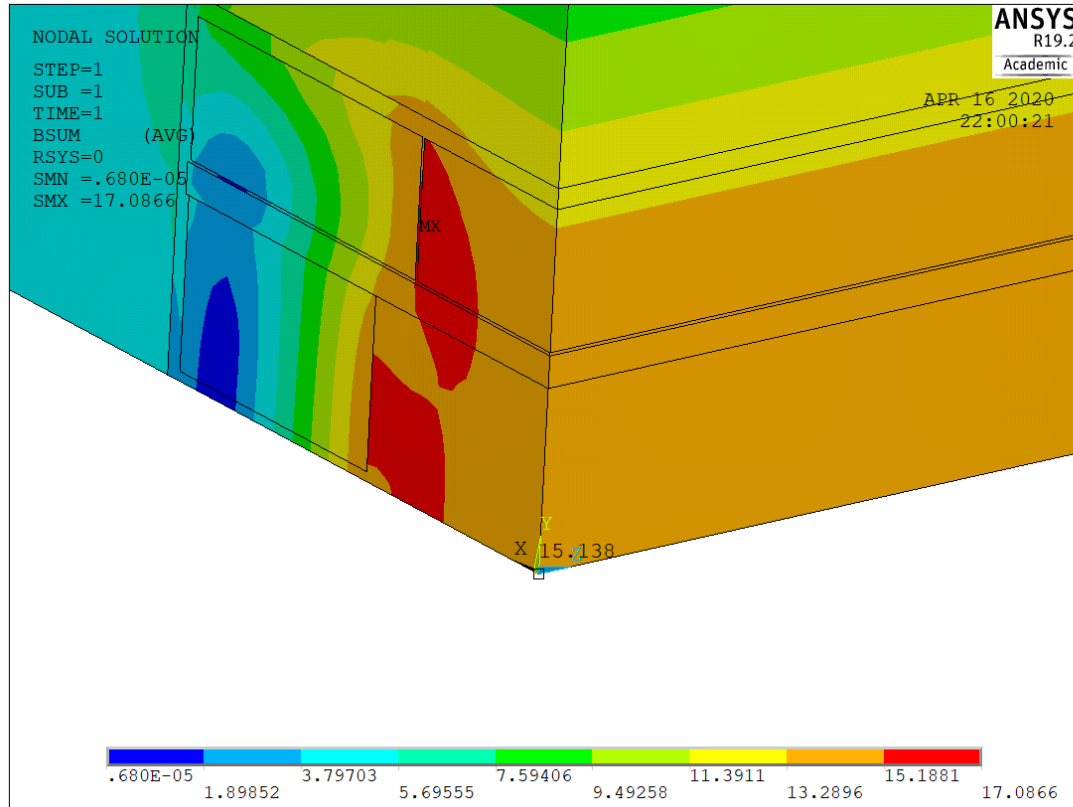08 May 2020

Finite element model

Formulation

ANSYS element SOLID236 is used. It is an edge element and it allows to appropriately manage eddy current analyses with non linear materials.

Loading

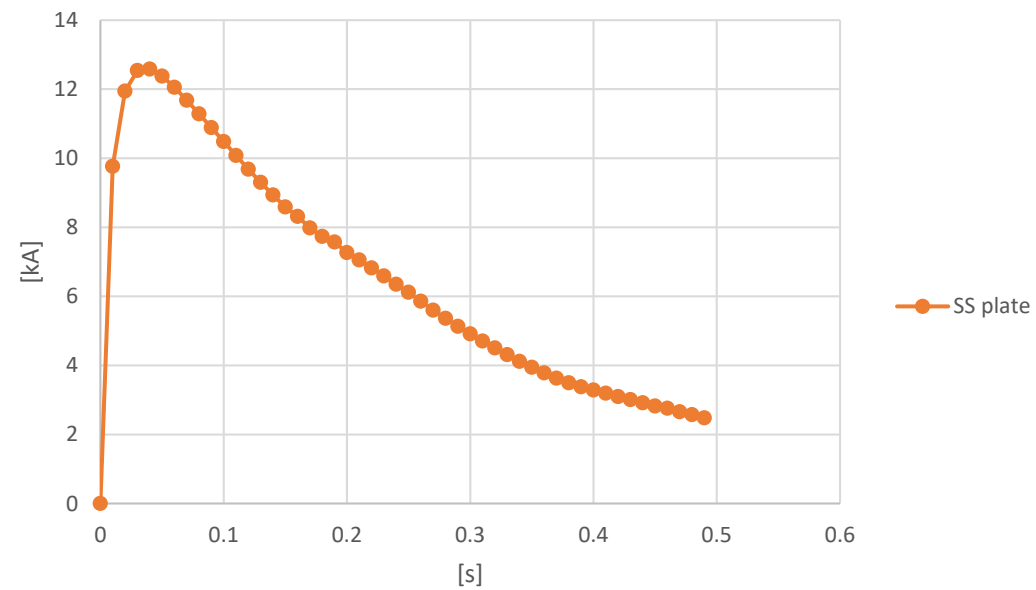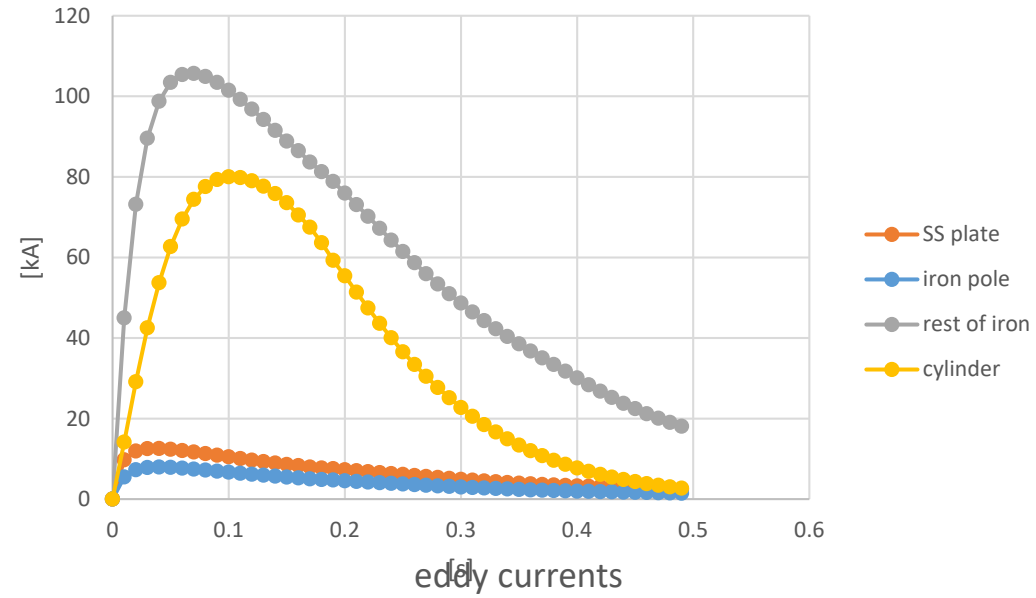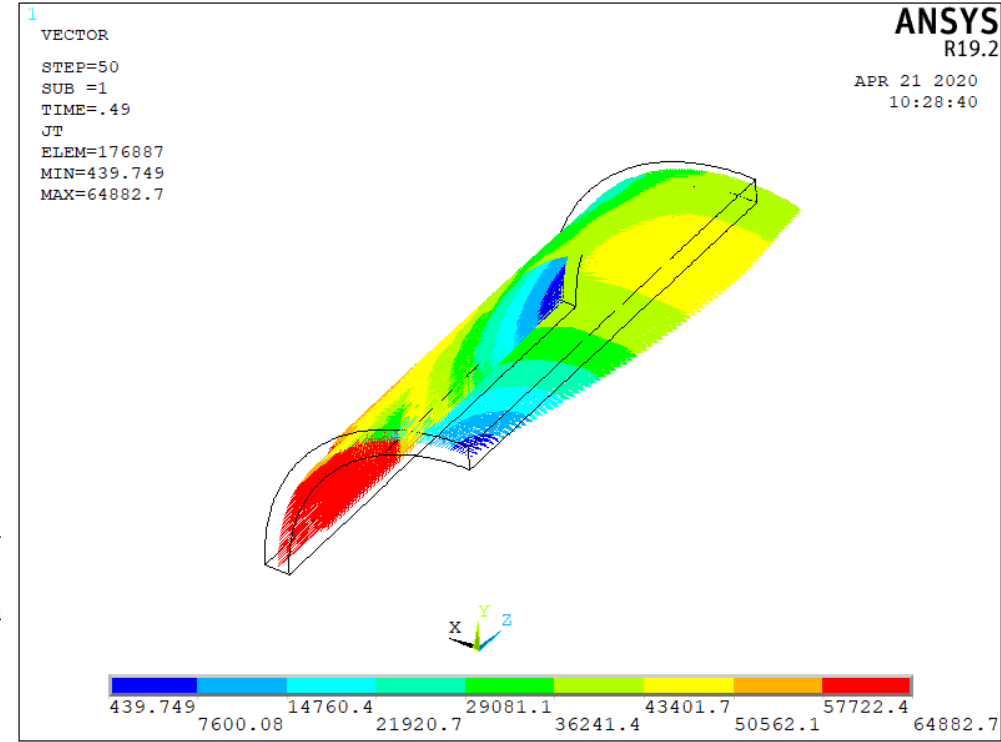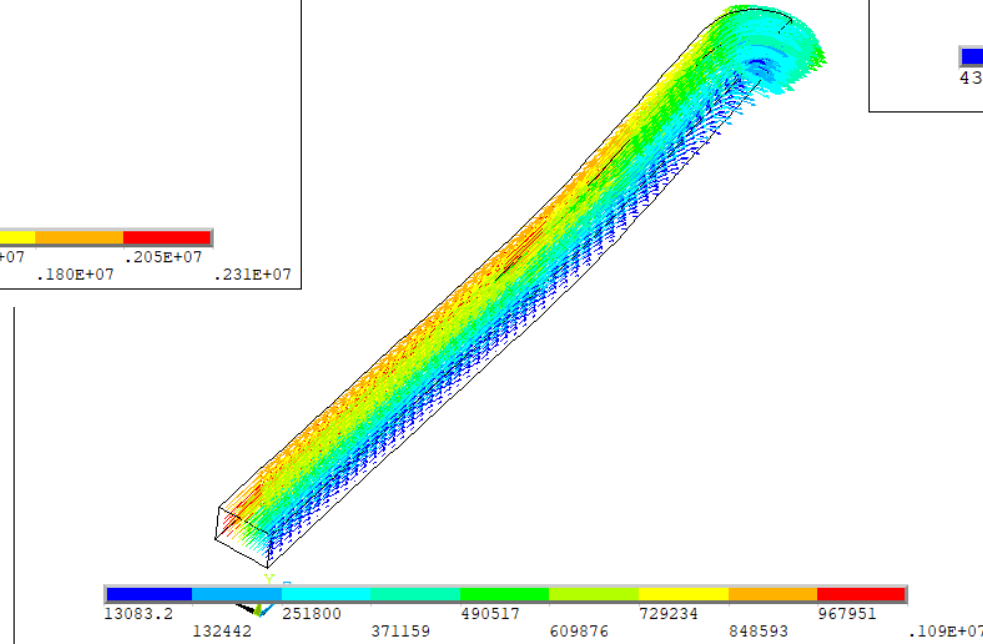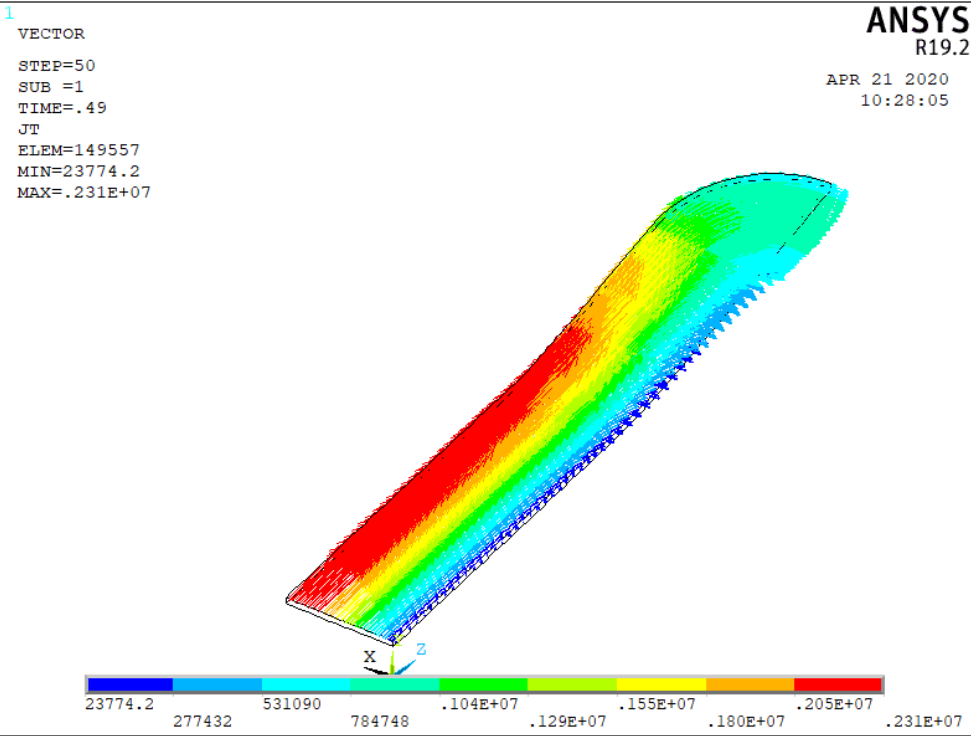## Current in the coils is varied with an exponential law and 0.2s time constant
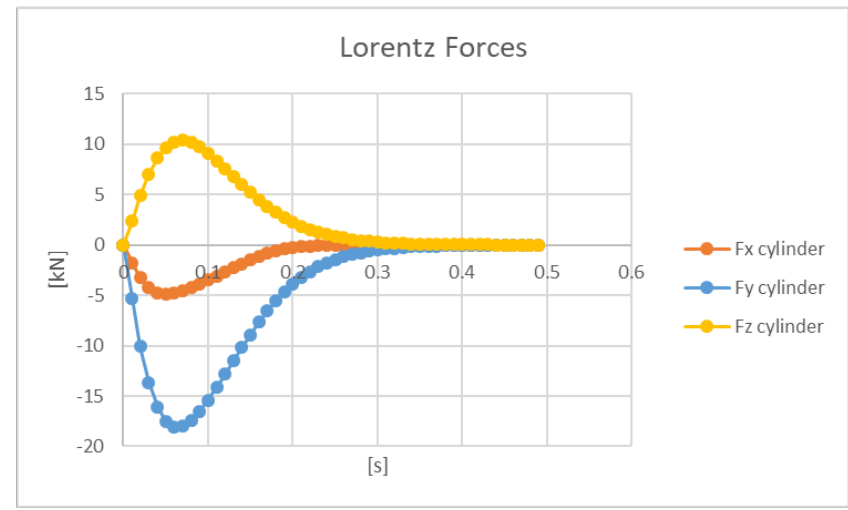
current in the coils
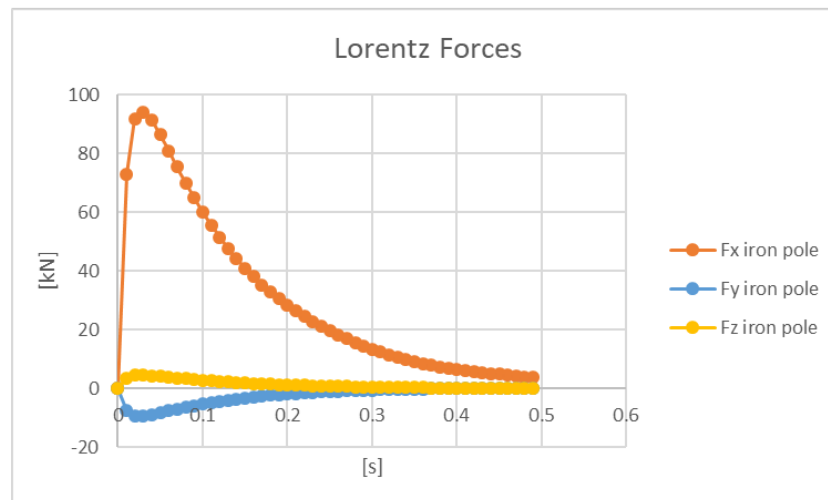
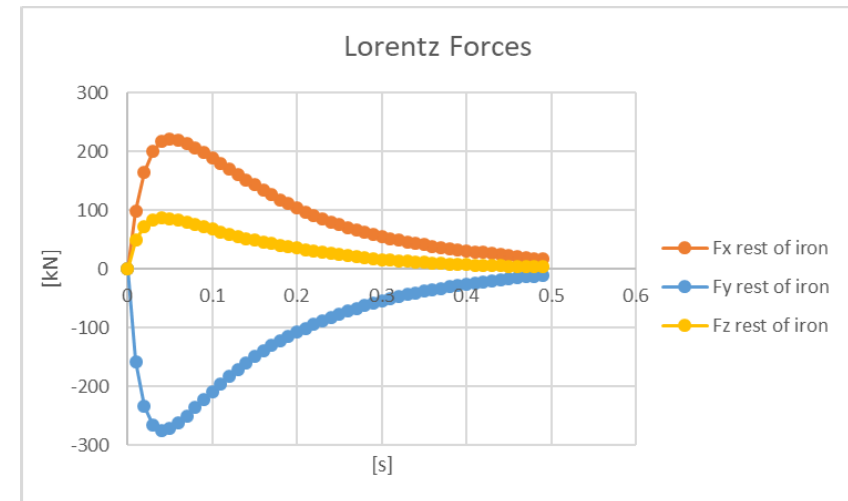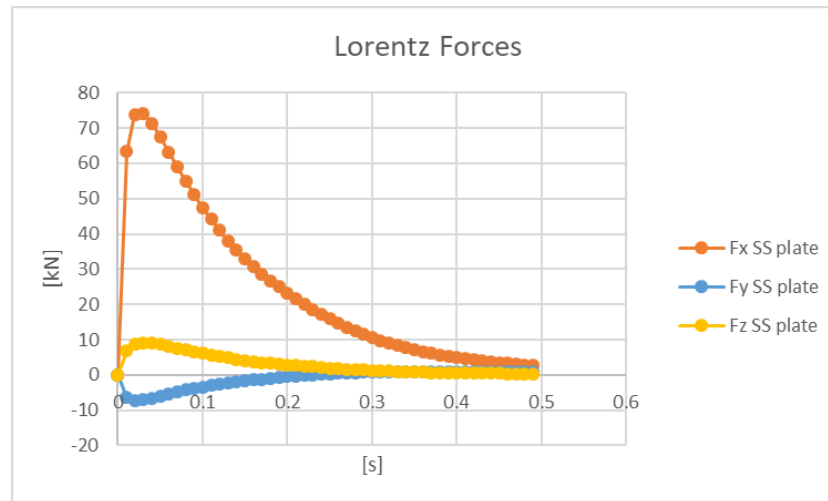# Initial conditions

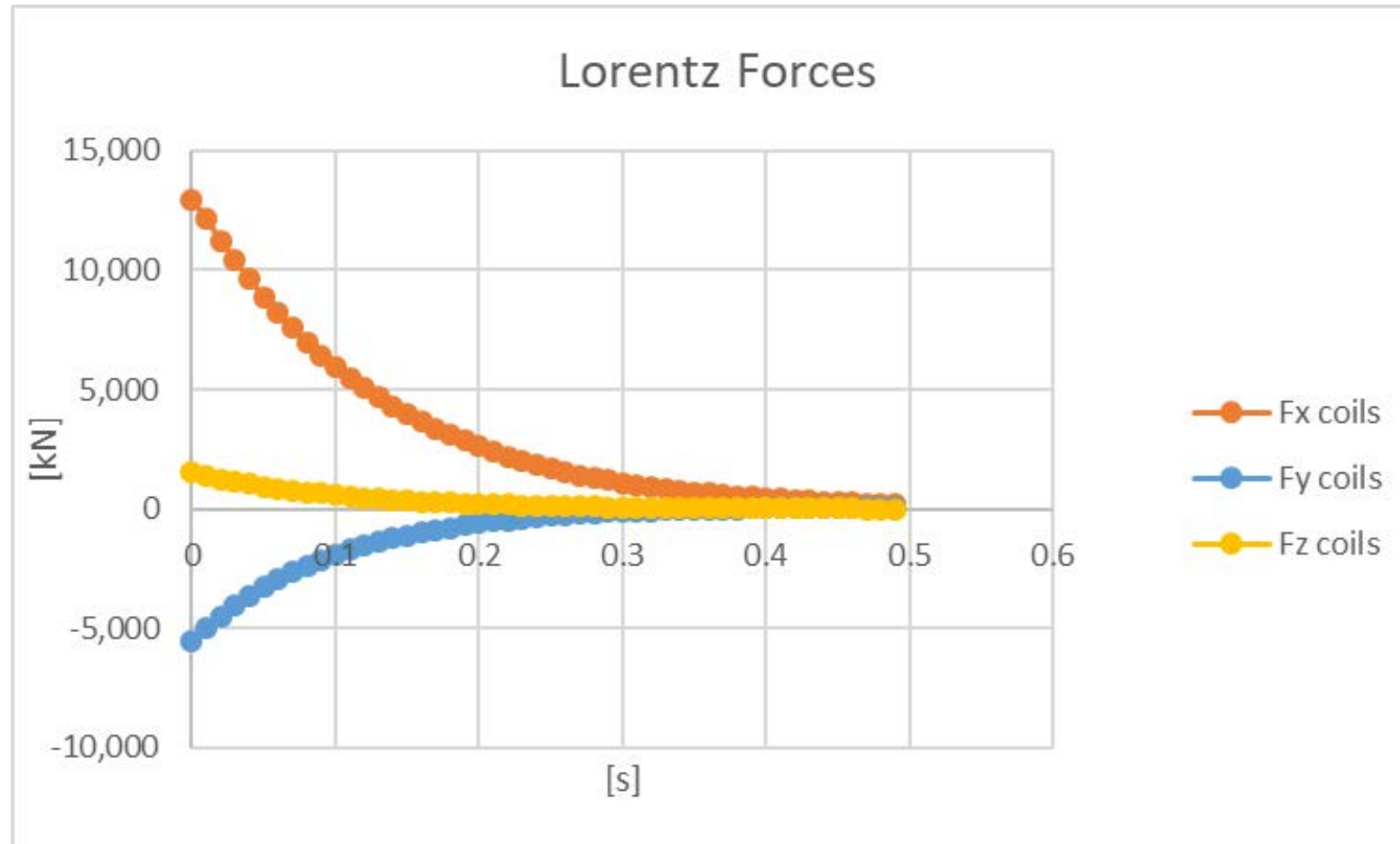# Evolution of eddy currents

Eddy currents

Evolution of Lorentz forces for 1/8 of the magnet

Evolution of Lorentz forces for 1/8 of the magnet

- Thank you

Back up