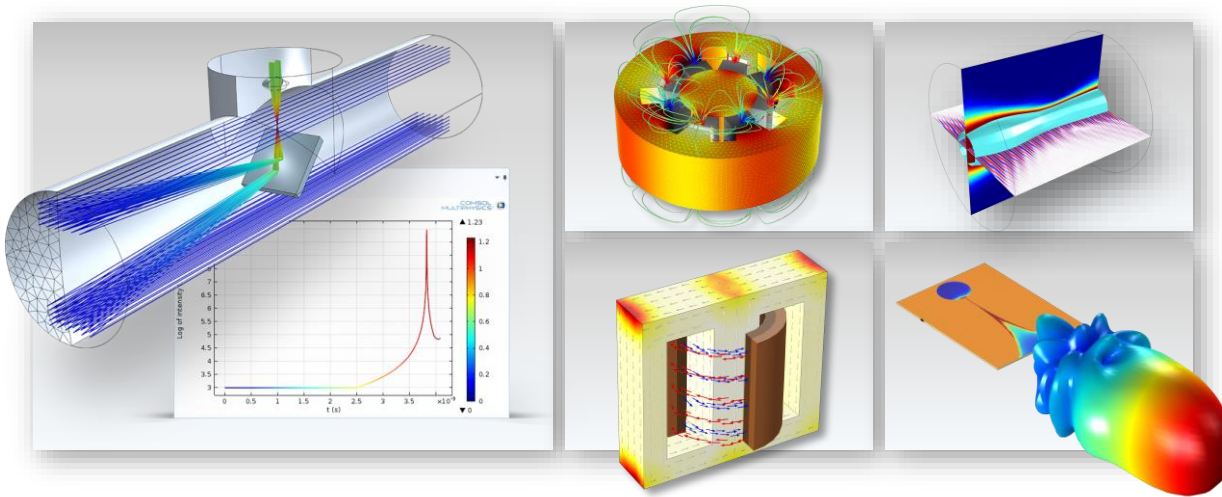


# Elektromagnetismus

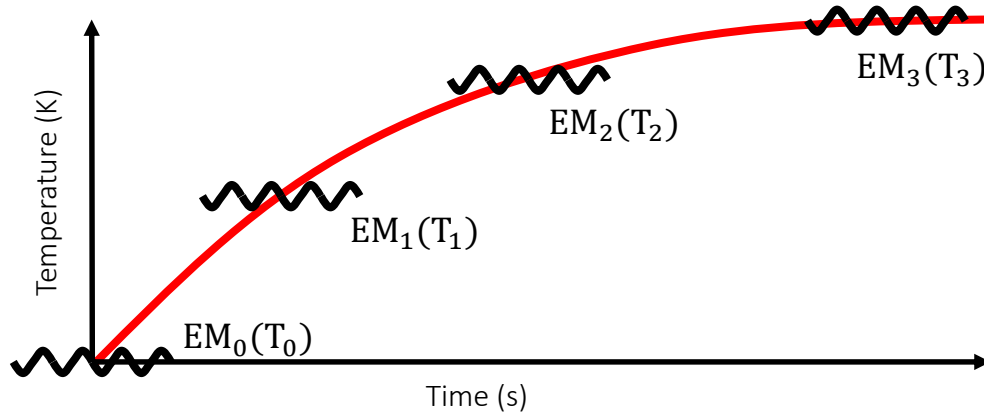


# Time Scales in Calculation

- 1) Electric and magnetic fields oscillate  $\sim 1$  GHz  $\longleftrightarrow$   $\sim 1$  ns
- 2) Thermal problem evolves on a scale of  $\sim 1$  s

## Solution

Solve thermal problem in the time domain and EM problem in the frequency domain, updating with new solution when material properties change significantly.



# Busbar AC

- Simulace AC zdroje ( $f = 50\text{Hz}$ )
- Zjednodušení zdroje napětí
- Výsledky
  - Magnetické pole
  - Hustota proudu
  - Elektromagnetické síly
  - Indukovaný proud

