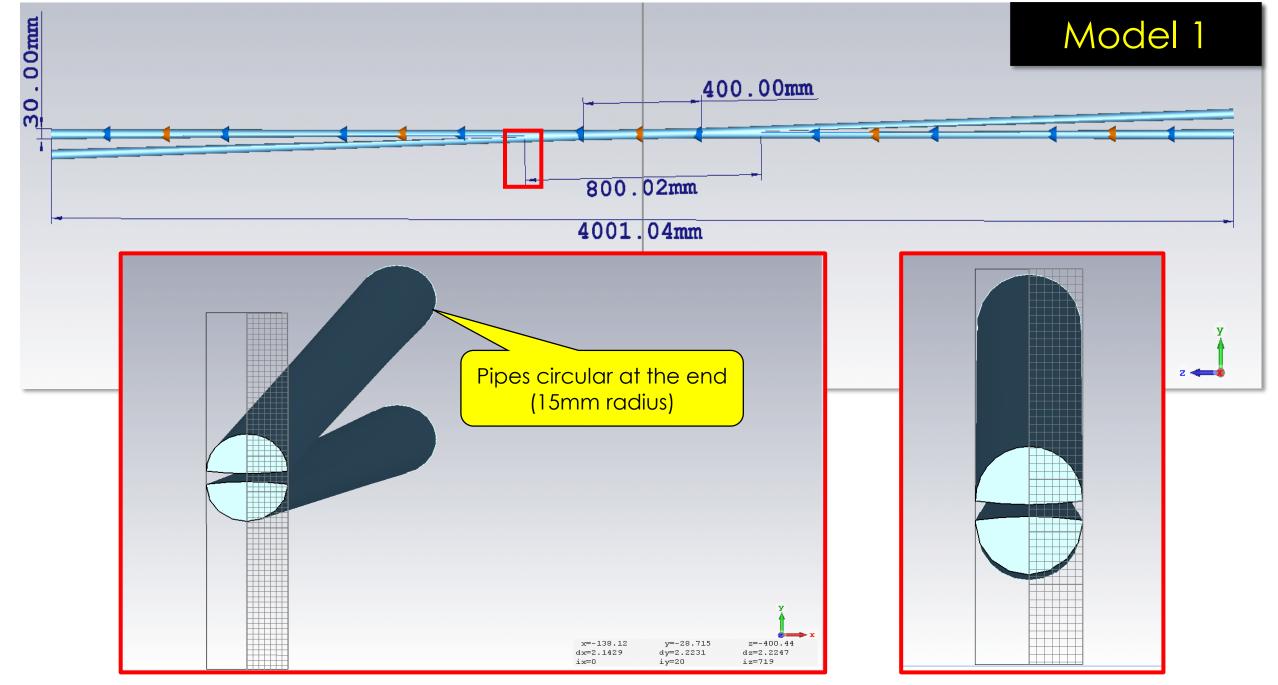


### Trapped modes analysis update



- > Different bunch lengths and mesh sizes
  - $\square$   $\sigma_z = 10$ mm,  $\Delta_{x,y,z} = 1$ mm
  - $\square$   $\sigma_z = 5$ mm,  $\Delta_{x,y,z} = 0.5$ mm
- ➤ Models 1,2 different form previous structure
  - ☐ We found a resonance in both models
- Some meshing problem
  - a CAD model would be preferred



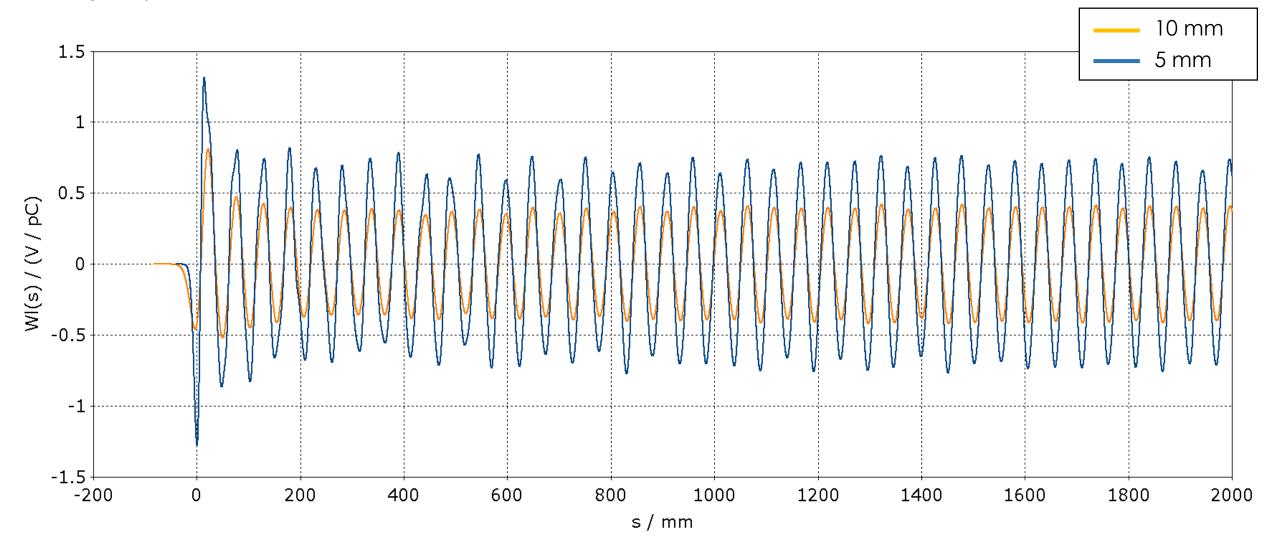
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# Wake potential

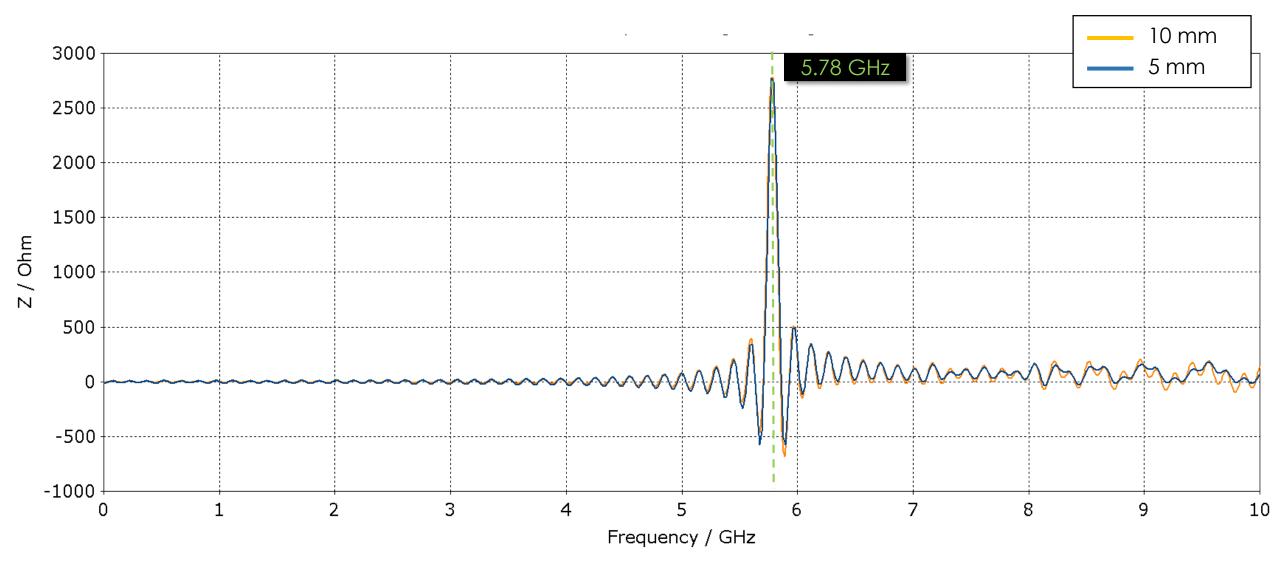






### Impedance





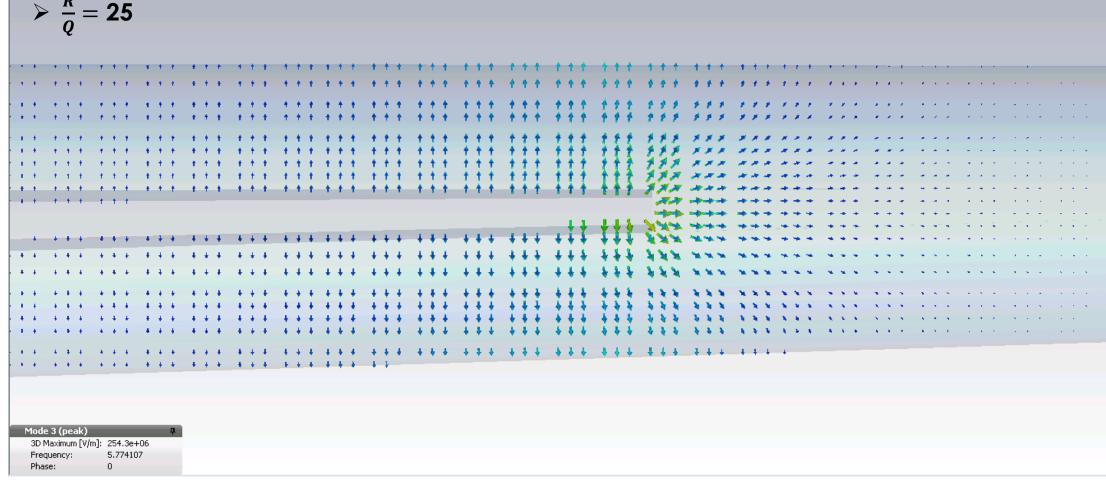


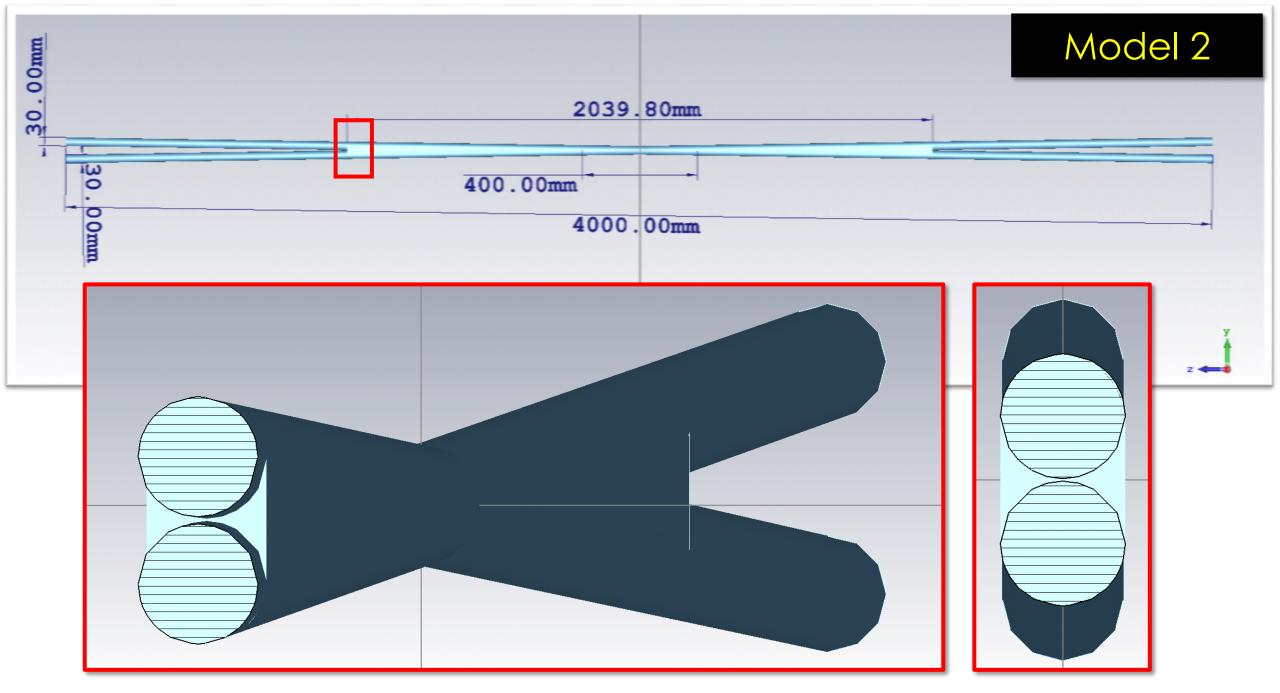
### Eigenmode simulations



- $\triangleright$  Quality factor Q = 8558
- ightharpoonup Shunt impedance  $R_{shunt} = 210 \text{ k}\Omega$

$$\Rightarrow \frac{R}{Q} = 25$$





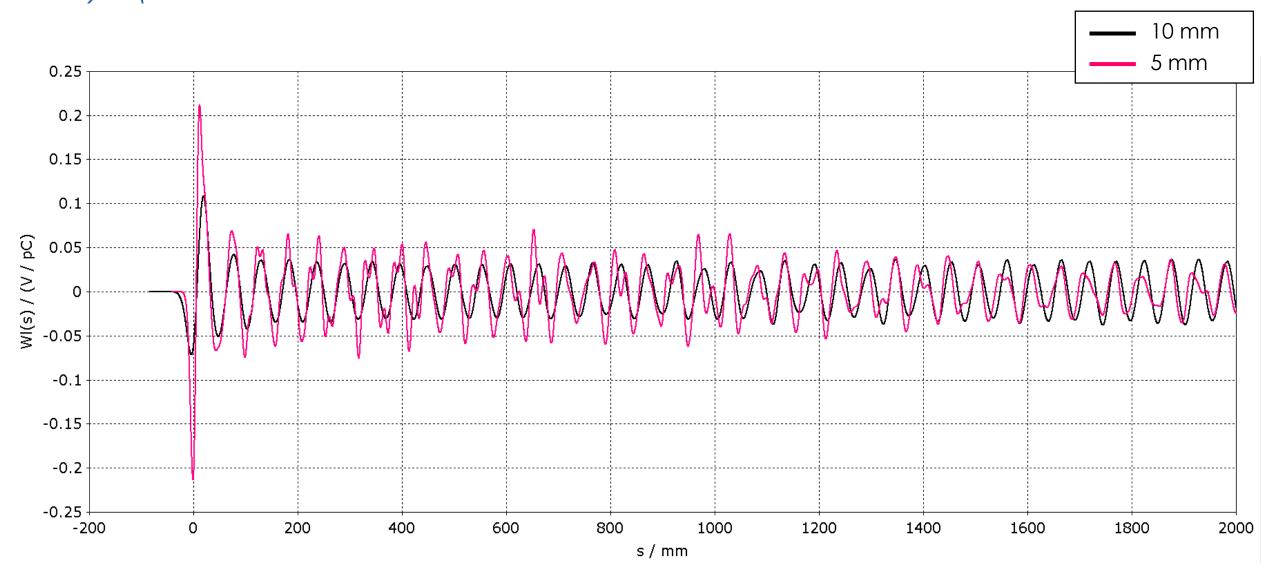
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# Wake potential







## Impedance



