



I²FG

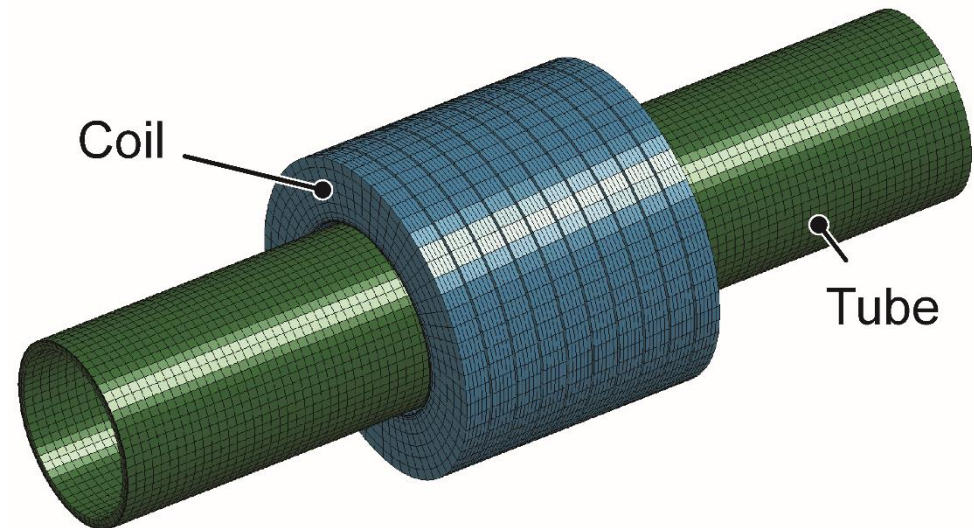
International
Impulse Forming
Group

Benchmark Numerical Simulation Objectives and Call for Participation

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Comparison of simulation models for an example EMF process

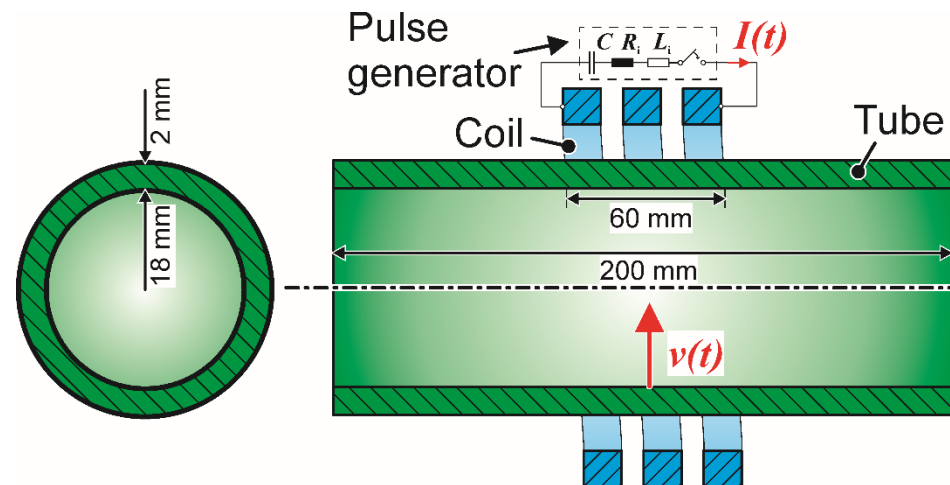
- Accuracy
- Identification of important parameters
- Computational costs
- Share of best practice
- ...



**Presentation of results
at the next I²FG-Meeting**

Electromagnetic compression experiment

- Pulse generator characteristics
- Coil geometry
- Tube geometry ($\varnothing 40 \times 2 \text{ mm}$, $l = 200 \text{ mm}$)
- Coil and tube material data
- Recorded current
- PDV: velocity vs. time curve
- Measured final tube geometry: axial and circumferential direction



Participants (so far)

Experiments:

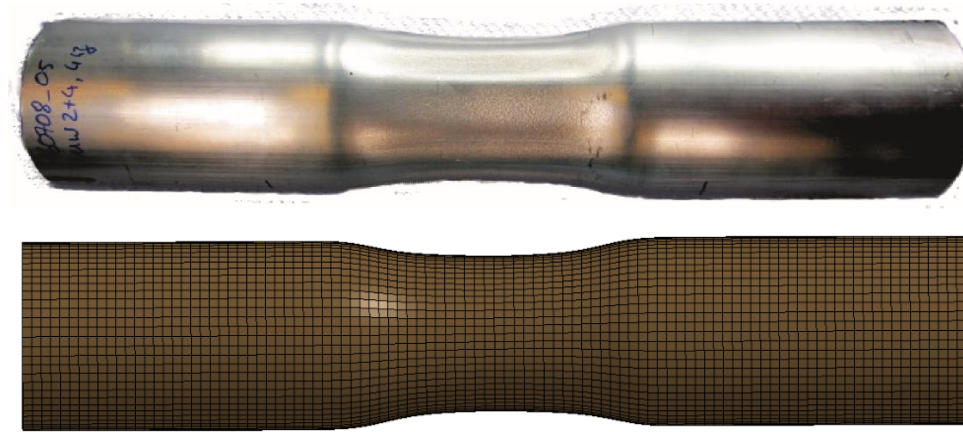


Simulation:

- **LS-DYNA** 3D & 2D axisymmetric:
- **ABAQUS** 3D (incl. Co-simulation):
- **ANSYS** 3D (incl. own routines):



And?



Thank you for your attention.

Interested persons please contact:

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