

# Learning methods in computational mechanics

## Setting:

Recently, learning methods have been successfully applied to mechanical simulations. This approach already good results in non-linear examples including fluid dynamics and hyper-elasticity, promising to deliver accurate results in much shorter time.

## Project Characteristics

Modeling: ★☆☆☆☆  
Mathematics: ★★★★★  
Programming: ★★★★★  
Science: ★★★★★

## Your Tasks:

- Gain an understanding of the basic ideas of different existing approaches,
- Choose and implement one method,
- Produce some 1D examples,
- Implement and compare a second method.