## PhD student position

The Chair on Numerical Modelling and Simulation (mns.epfl.ch) at EPFL is offering a PhD student position, in the area of computational mechanics and numerical analysis for PDEs.

### Areas of interest:

This position is funded by the European FET Open project "Analysis, Design, And Manufacturing using Microstructures - ADAM2".

It is open to prospective PhD candidates willing to develop isogeometric numerical methods in mechanics, which is the core activity of the chair.

The perspective candidate will be working within a very active group of researchers dealing with isogeometric methods in many different research directions: computational mechanics, approximation theory and geometric modelling.

We seek for candidates in the field of computational mechanics, willing to develop new algorithms for solid mechanics problems and test them within our in house C++ platform.

More precisely, the research focus is on the development of scalable efficient methods for the analysis of the elastic response of complex geometries composed of thousands/millions of microstructures, as well as their shape and/or topological optimisation.

# Prospective PhD student should have:

- a Master's degree in mathematics, mechanical engineering or related disciplines, with excellent grades.
- a strong background in scientific computing with C++.
- experience in geometrical modelling and/or domain decomposition methods would be a plus.
- creativity and motivation for addressing computational mechanics problems.
- excellent English language skills.

### We offer:

- the enrollment (prior to validation of doctoral school) in EPFL PhD school in Mathematics or Mechanics
- a young and dynamic work environment at one of the top universities in Europe.
- a very competitive salary.

#### Information & contact:

The position is open starting anytime after Jan. 1st, 2020 and applications are welcome until the position will be filled.

To submit your application, please write to <u>pablo.antolin@epfl.ch</u> sending your CV, your relevant publications if any, your graduate transcript(s), a letter of motivation, and two names for references.

Dr. Pablo Antolin Chair of Numerical Modelling and Simulation Institute of Mathematics EPFL