* **Further literature**

The main paper that introduces Mfront has been uploaded on the seafile folder.

Further literature will be read and uploaded in the upcoming weeks.

* **Application areas of MFront**

Mfront can be used to generate codes for customized material models in several programming languages such as python, Fortran, C, C++ etc. Mfront can be embedded in several FEM solvers for this purpose. Following is a list of common mechanical behaviors that can be implemented using Mfront.

Mechanical behaviours

Hyperelasticity

Hyperviscoelasticity

Viscoelasticity

Non linear elasticity

Damage

Plasticity

Viscoplasticity

Single crystal

* **Role of MFront**

In all cases, MFront strives to provide the most natural way of implementing the material knowledge under consideration. In technical terms, MFront provides for each case a **domain specific language** which is meant to be simple and expressive.

MFront converts a material model into a generated code that can be implemented in FEM simulations in a wide range of solvers. MFront's generated code is as efficient as native implementation according to the authors of the original paper.

* How does MFront work
* Based on which computer language

C++

* What can be benefited by using MFront
* Coupling between MFront and OGS
* the interface for mfront and ogs is the MGIS interface. There is a paper written by the creators that describe the usage in detail.