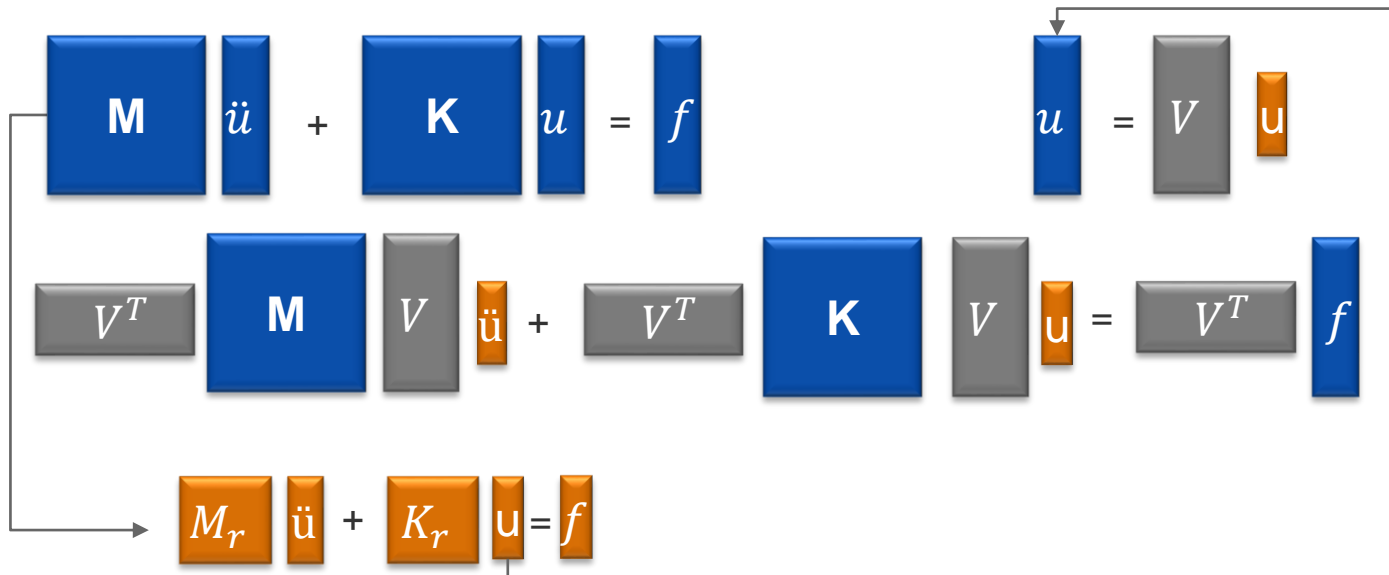
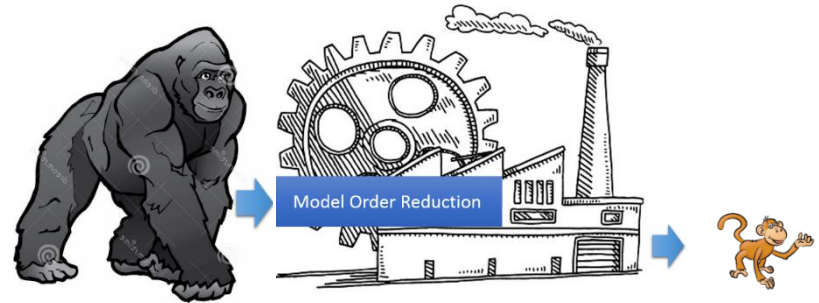


Model Order Reduction Library

Model Order Reduction (MOR) methods aim to reduce the dimensions of an original system of Equations (ODEs or PDEs) to a lower-order model that approximates the behavior of the system just as precise as the original model.



Model Order Reduction Library

Project Characteristics

Mathematics: ★★★★★☆
Programming: ★★★★★★

Your Tasks:

- Implementation of MOR Techniques (classical and state-of-the-art Methods) for second order systems in a Java environment.
 - Users should be able to combine different MOR Techniques.
- Comparison of the time efficiency for solving the systems of equations using commercial FE software and your implemented algorithms.

Programming language:

- Java



eclipse



What you will learn in this project:

- Object-oriented programming with Java
- Design Patterns
- Numerical linear algebra implementations