

Mathematical model

Partial differential equation (PDE)

Geometry model

Numerical model

MoFEM ecosystem

PETSc - manages algebra

Matrices, vectors and many solvers

Interfaced by Discrete Manager (DMMOFEM)

MoFEM - manages discretisation

Finite elements

Algebraic equations

Approximation

Integration

Assembly

MoAB - manages topology

Mesh and data

Direct access to internal data structures by tag and connectivity pointers