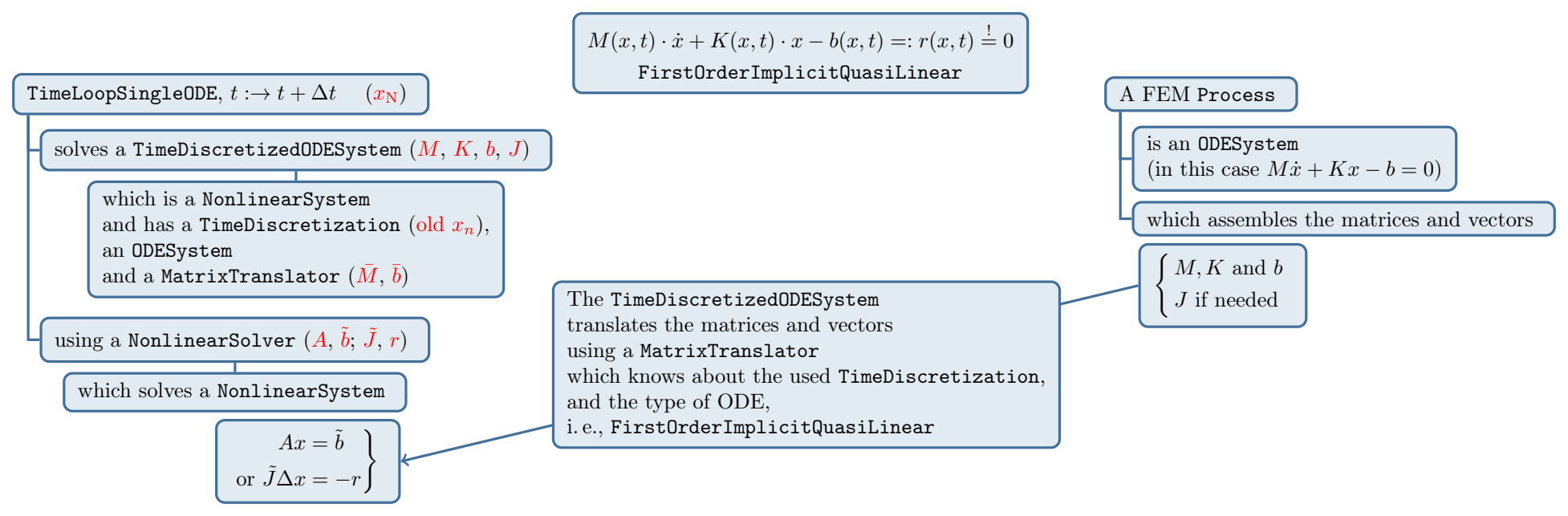
$M(x,t) \cdot \dot{x} + K(x,t) \cdot x - b(x,t) =: r(x,t) \stackrel{!}{=} 0$
FirstOrderImplicitQuasiLinear
TimeLoopSingleODE, $t :\to t + \Delta t$ (x_N)
solves a TimeDiscretizedODESystem (M, K, b, J)
which is a NonlinearSystem
and has a TimeDiscretization (old x_n),
an ODESystem
and a MatrixTranslator ($\bar{M}$, $\bar{b}$)
using a NonlinearSolver (A, $\tilde{b}$; $\tilde{J}$, r)
which solves a NonlinearSystem
$Ax = \tilde{b}$
or $\tilde{J}\Delta x = -r$
The TimeDiscretizedODESystem
translates the matrices and vectors
using a MatrixTranslator
which knows about the used TimeDiscretization,
and the type of ODE,
i. e., FirstOrderImplicitQuasiLinear
A FEM Process
is an ODESystem
(in this case $M\dot{x} + Kx - b = 0$)
which assembles the matrices and vectors
M, K and b
J if needed