

Unlike ODEs, PDEs can not be analyzed "uniformly" and there is no general PDE solver.

Numerical methods for PDE is a very vast subject and a vast area of research.

Given the limited amount of time, we look only at few examples...

Ex.: (1) Tubular reactor  $\leadsto$  slides

(2) Steady state tubular reactor  $\leadsto$  slides

(3) Time dependent tubular reactor

$\leadsto$  slides (Exercises!)  
on 13.11.24

Once more: this is a vast subject and we only glanced at the subject

Other methods: finite volume

finite element

Discontinuous Galerkin (DG)