



Think before you compute

- Conservation laws and the numerical solution of the Navier–Stokes equations
- Transport equations
- *Brief intro to Basilisk coding framework*

First coding steps

- Implementing basic transport equations in Basilisk C.
- Using headers in Basilisk, modular code structure, problem setup, and compilation
- [1st Working Assignment](#)

Next coding steps

- Solving Navier–Stokes equations in Basilisk C: [2nd Working Assignment](#)

Interface Dynamics

- Interface tracking methods (VoF, level set, phase-field approaches) and numerical strategies
- Hands-on tutorial with interface-tracking to a simple two-phase problem: [3rd Working Assignment](#) 

Non-Newtonian flows

- Non-Newtonian flows: viscoelasticity.
- Coding exercises for viscoelastic fluids: [4th Working Assignment](#) 

Special topics

- Three-phase flows.
- Holey Sheets.
- Contact line dynamics.