What we did since milestones

Fluid improvements
  ◦ Tried out reseeding
  ◦ Ghost fluid for pressure
  ◦ Variable viscosity

Link fluid and temperature simulation
  ◦ Particles carry temperature

Optimization:
  ◦ Use Eigen::MatrixXd instead of Array2D
  ◦ Tried out float vs double, no noticeable improvements

(Clean up, bug fixes, document, improve UI)
Temperature linked with fluid
Ghost pressure gives smoother boundary
Side effect

Leave out pressure solver
Strange behaved viscosity solver
Viscosity: 10m
Profiling Runtime

- Mostly Eigen::ConjugateGradient solvers
- Could be improved with an adaptive domain
- May not make sense due to the overhead
What we left out

• 3D -> focused on real-time and interactivity instead
• SDF for solids