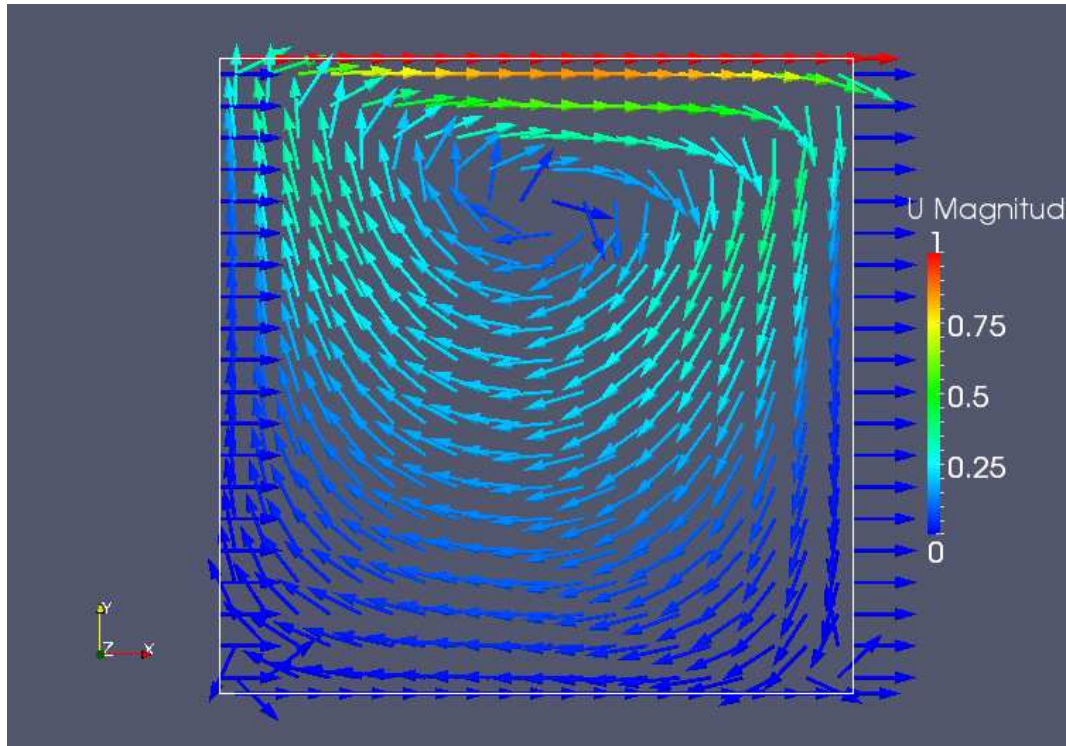
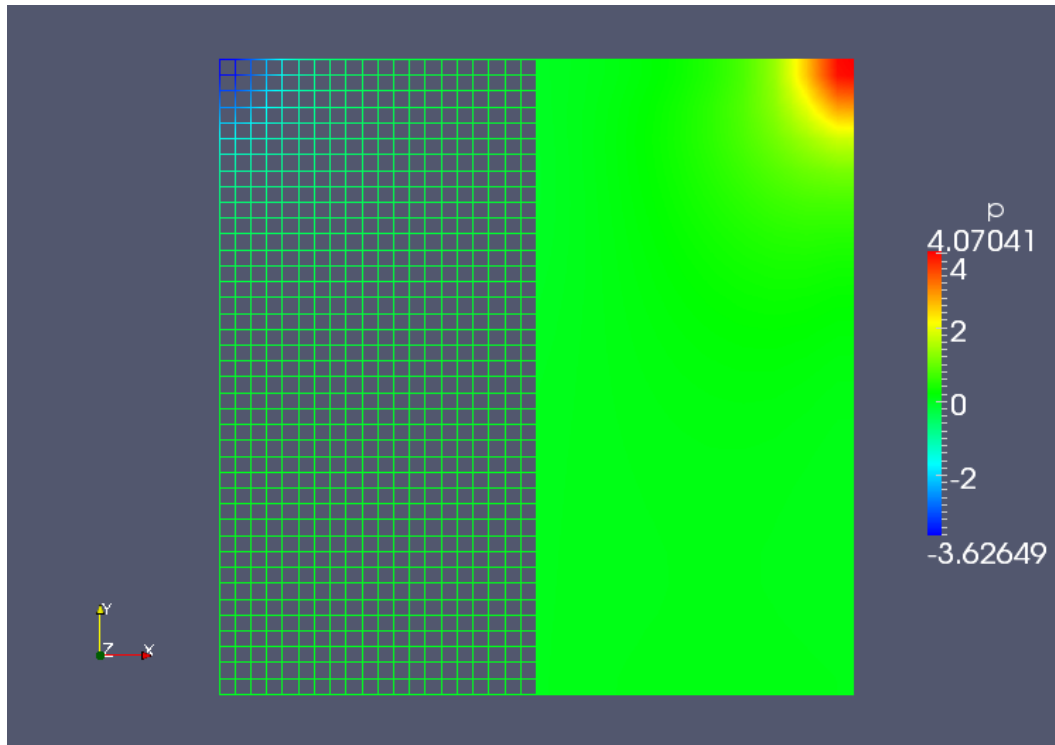


## cavity



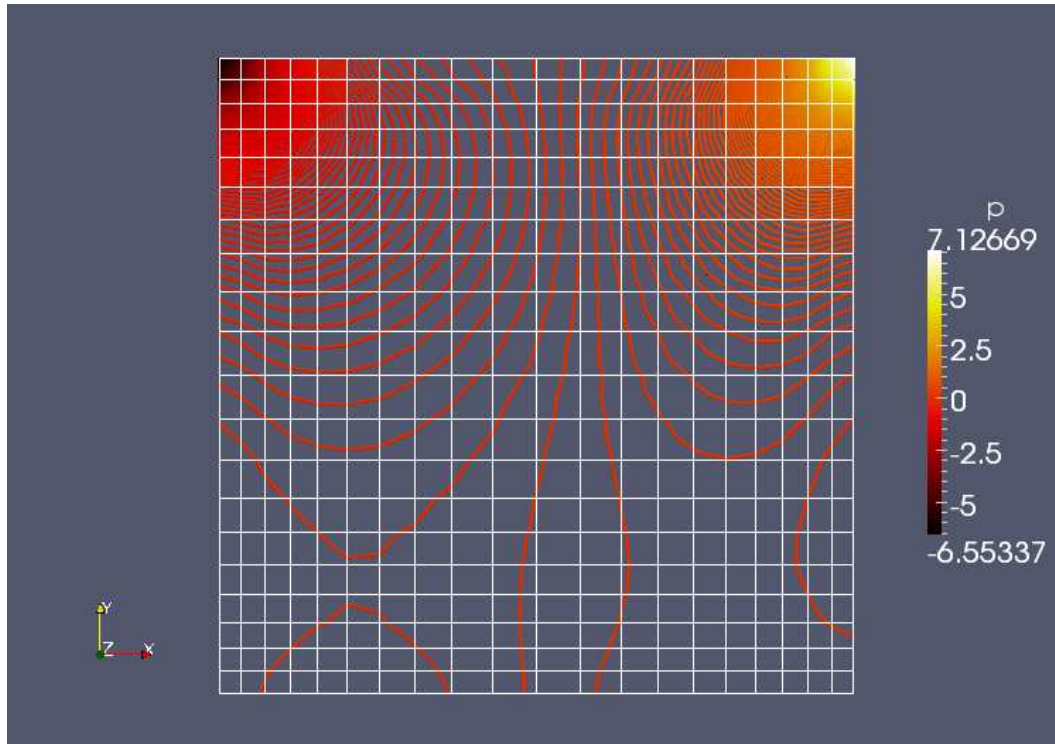
- Velocity vectors colored with its magnitude.

## cavityFine



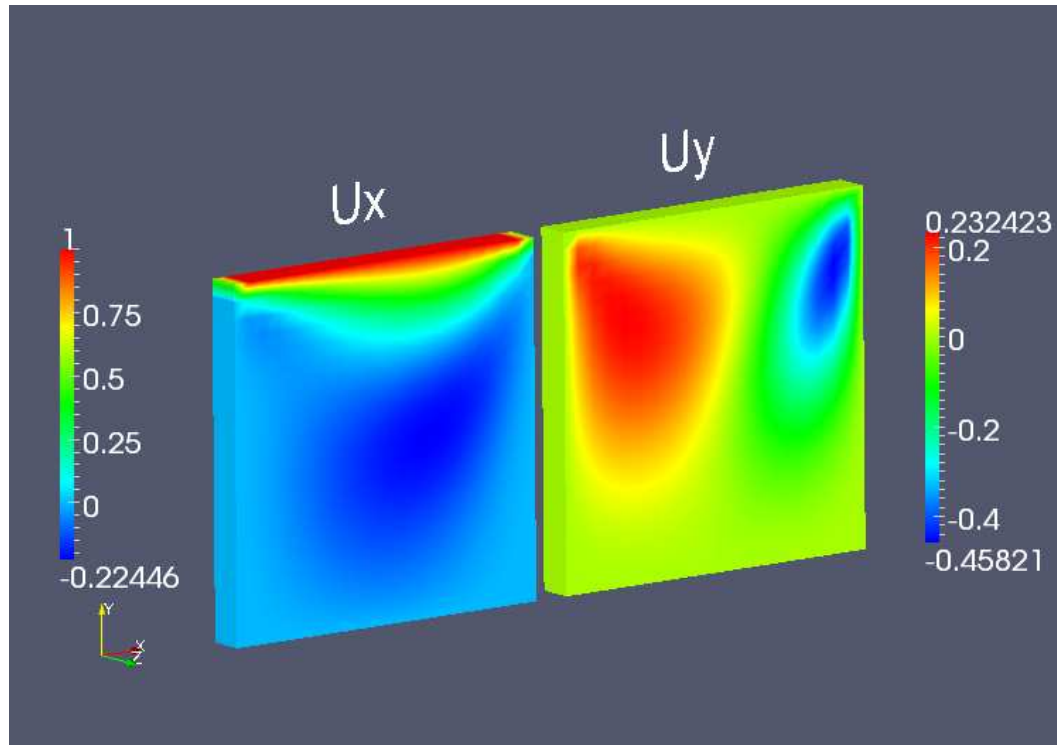
- Pressure distribution over wire-frame and a clipped surface plane.

## cavityGrade



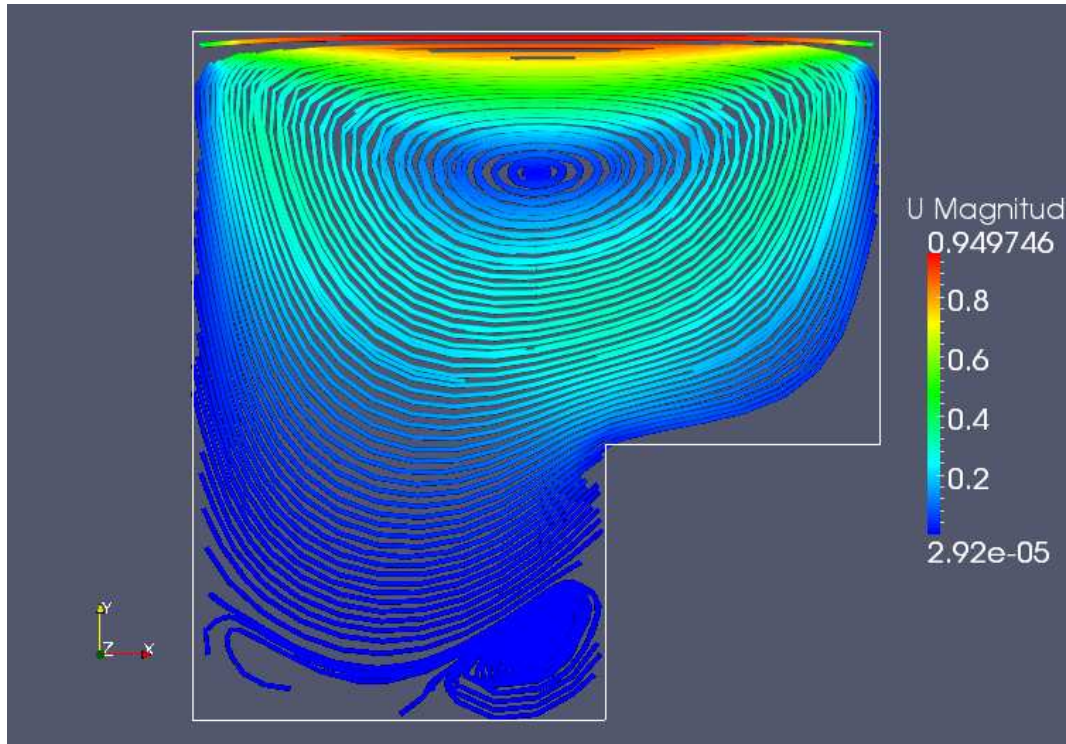
- Wireframe and contours of pressure with tube filter.

## cavityHighRe



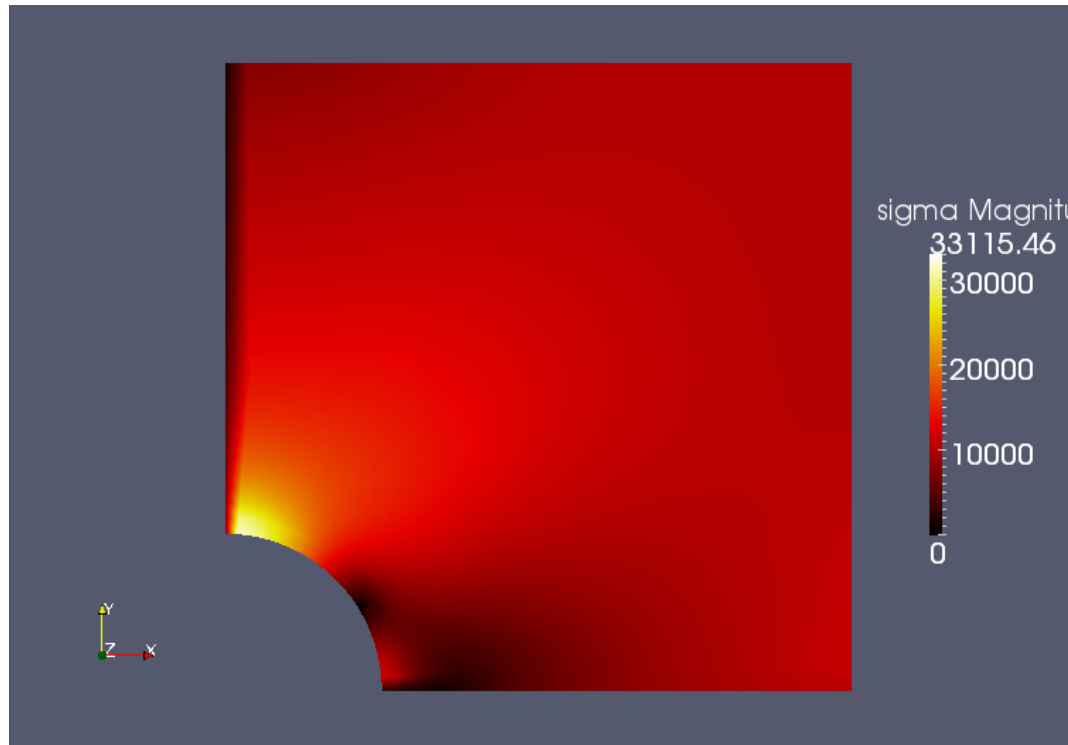
- Velocity components  $U_x$  and  $U_y$  calculated with foamCalc.
- One case of each component loaded and translated next to each other.
- A Source input of 3D text.

## cavityClipped



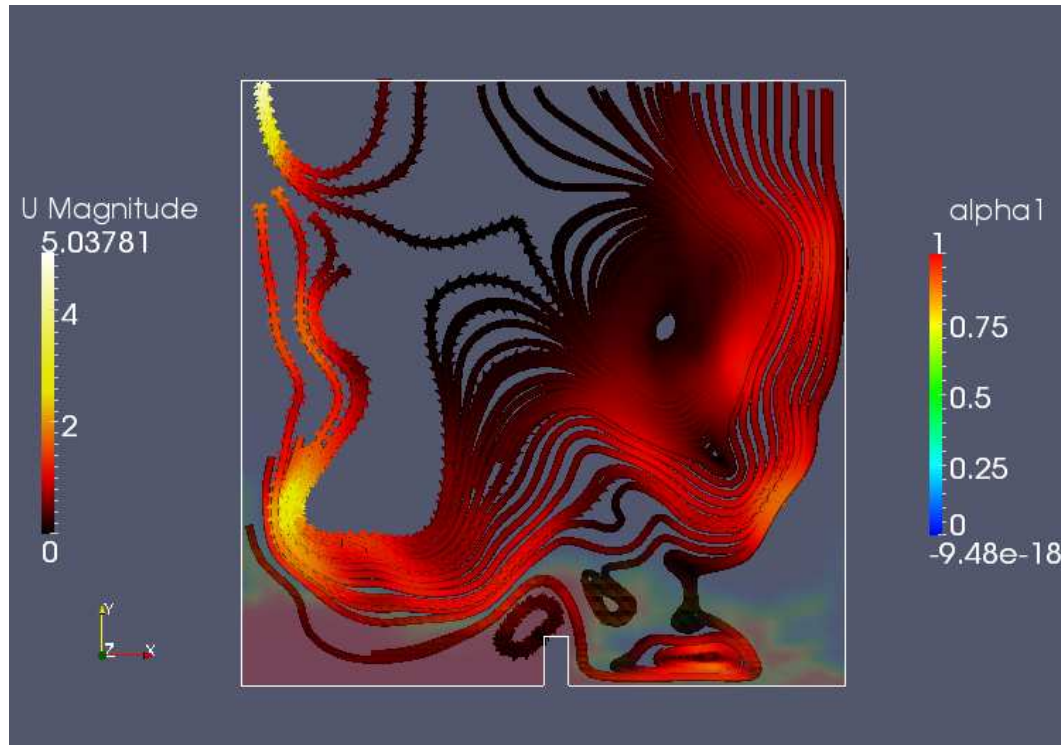
- Velocity streamlines with tube filter.

## plateHole



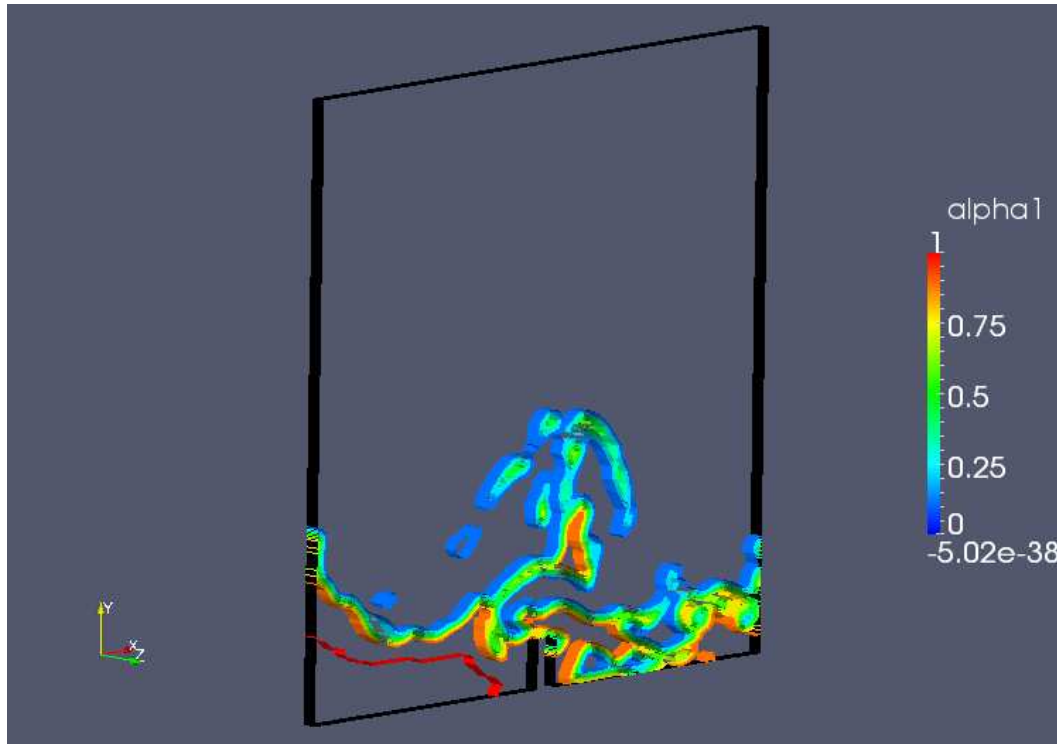
- Distribution of  $\sigma$ .

## damBreak



- Volume visualization of  $\alpha_1$ .
- Streamlines with tube filters and an additional glyph filter of cones. Inputs showing magnitude of velocity.

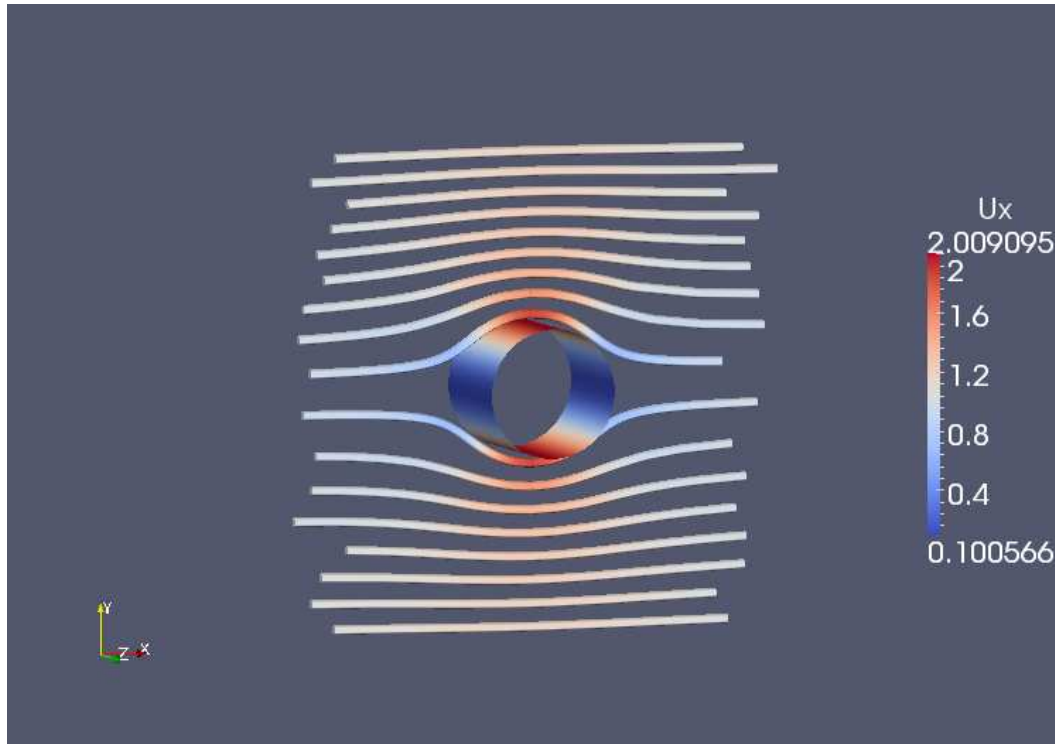
## damBreakFine



- Contours of  $\alpha_1$ .

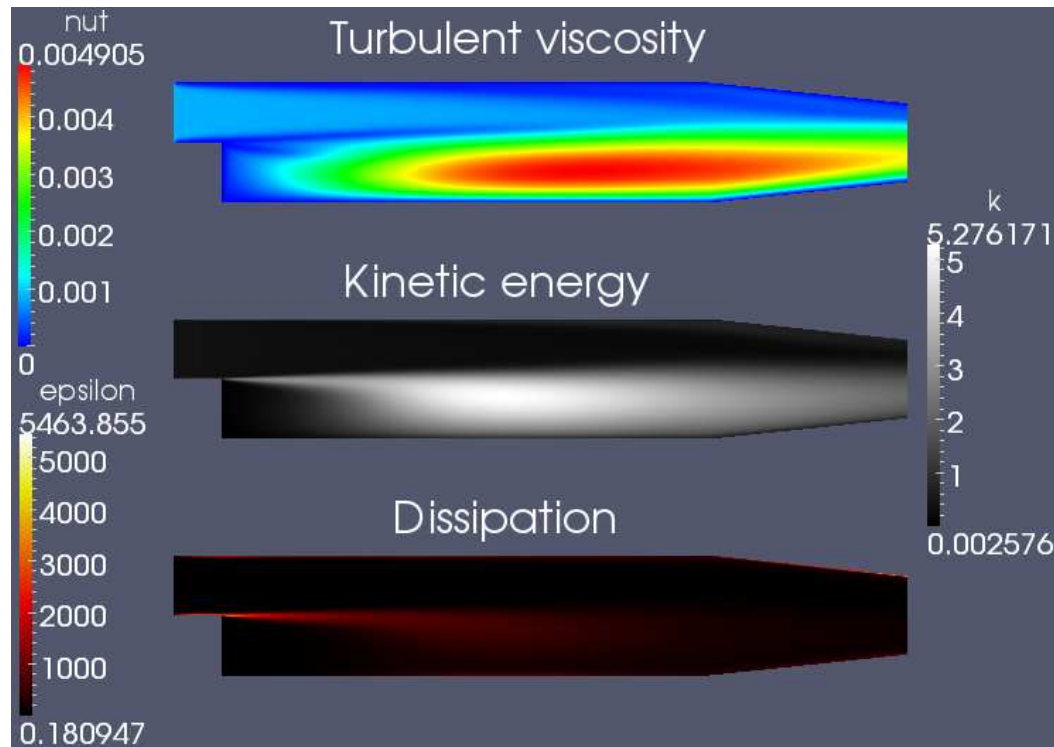


## cylinder



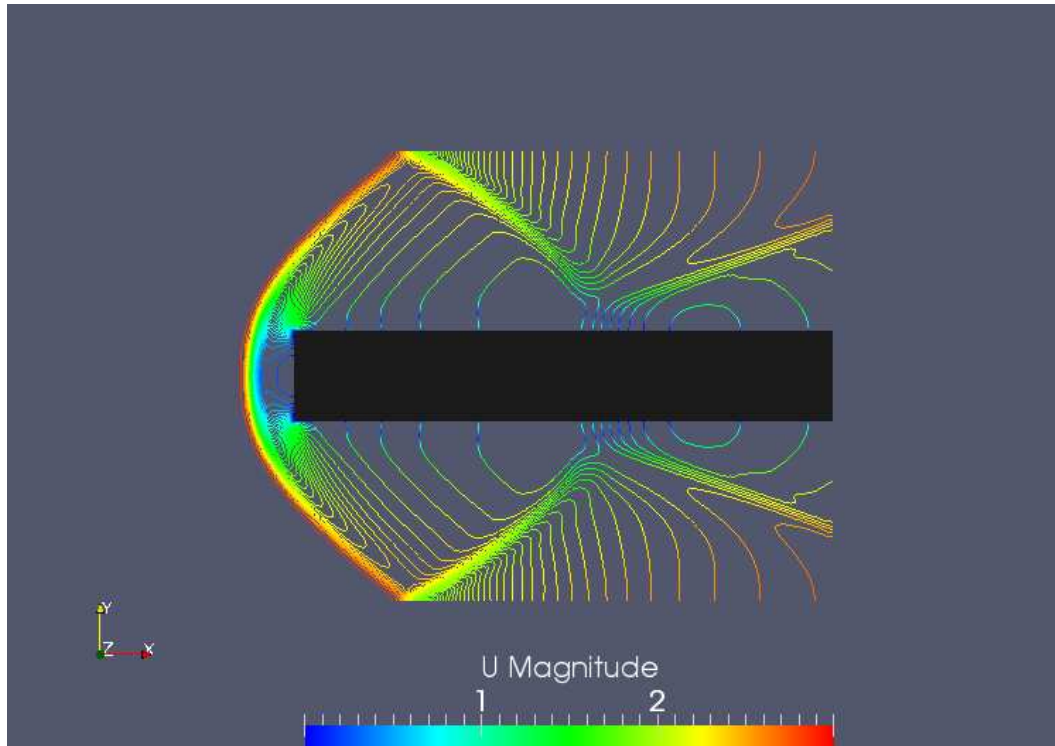
- Streamlines and tube filter to show velocity  $U_x$ .
- An additional domain added and rotated 180 degrees with orientation to symbolize the symmetry.

pitzDaily



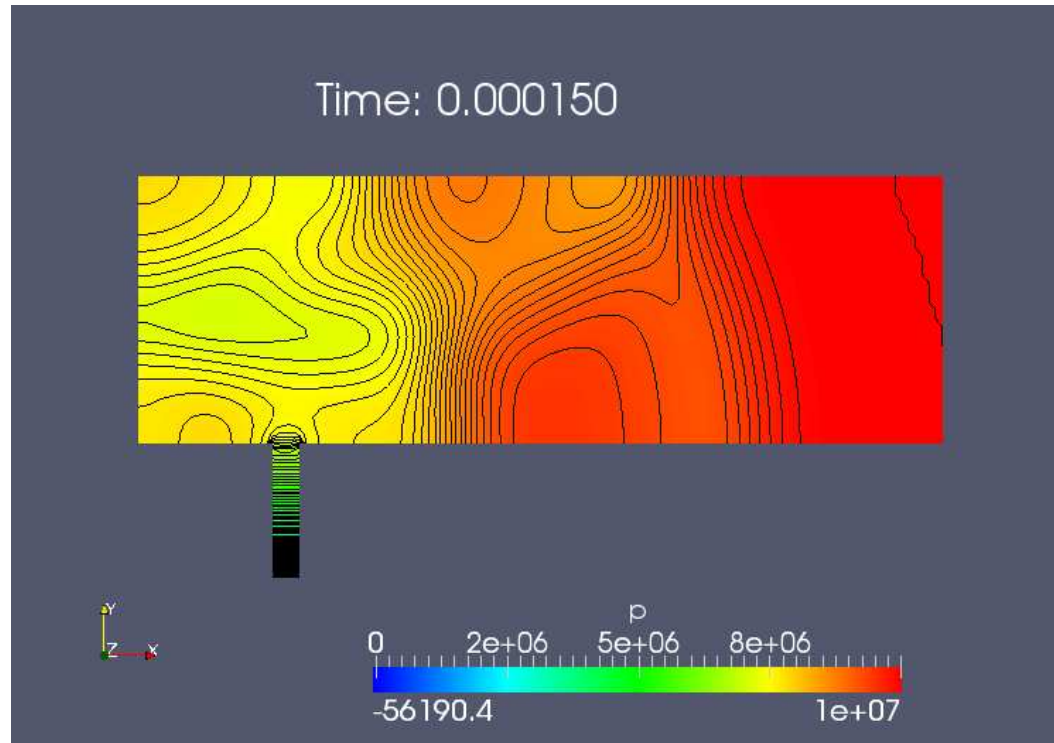
- Turbulent viscosity.
- Kinetic energy.
- Dissipation.

## forwardStep



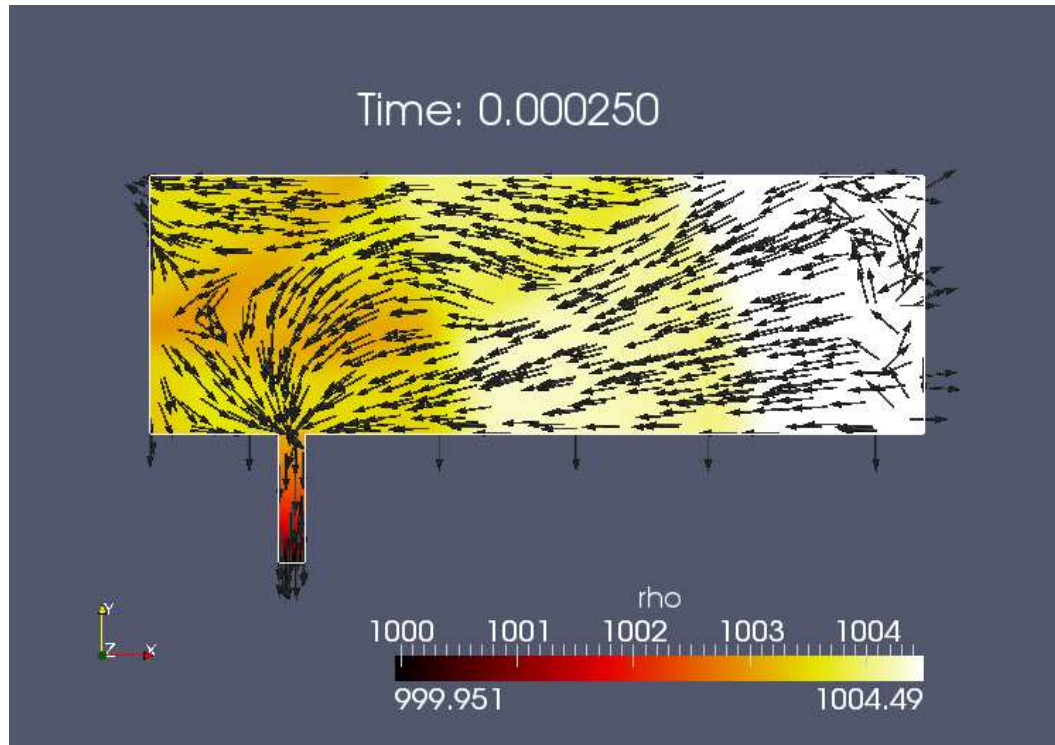
- Contours of Velocity.
- An additional domain added and rotated 180 degrees with orientation to symbolize the symmetry.
- Added a box to represent wall.

## decompressionTank



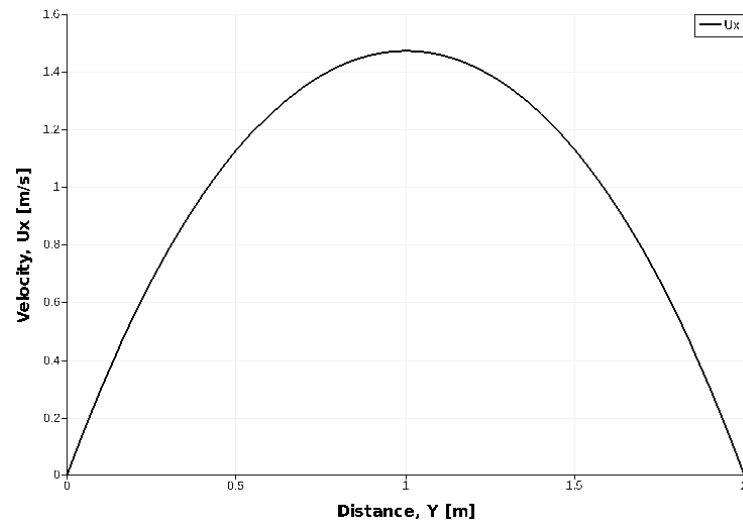
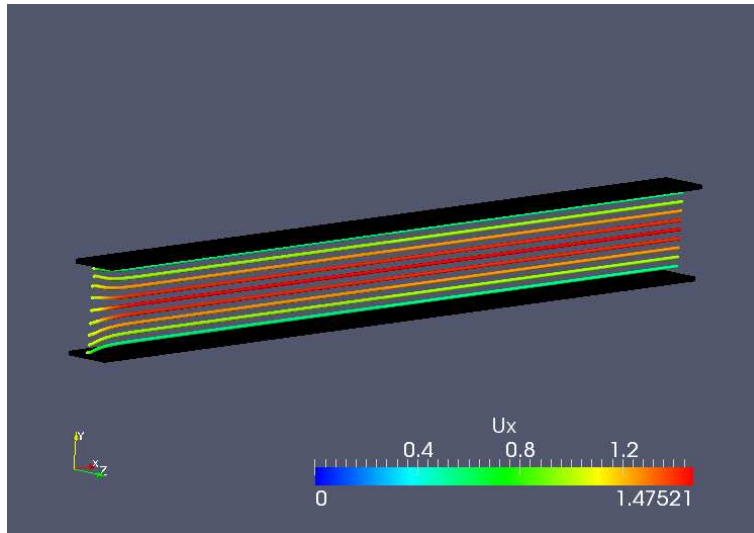
- Pressure distribution with iso-lines (contours colored with black).
- Background constructed with the extract surface filter and clip plane.

## decompressionTankFine



- Density distribution with vectors of Velocity.

## hartmann



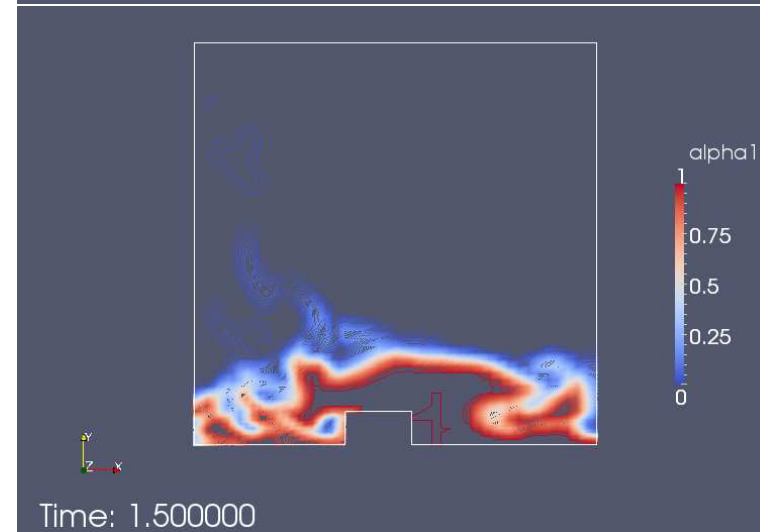
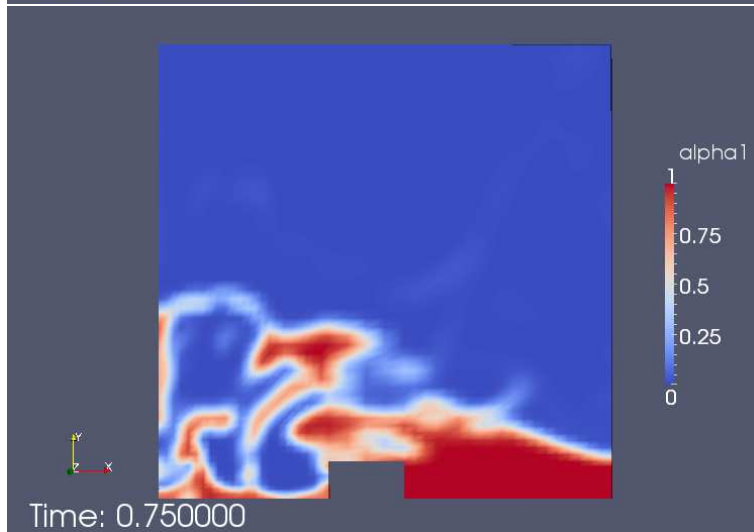
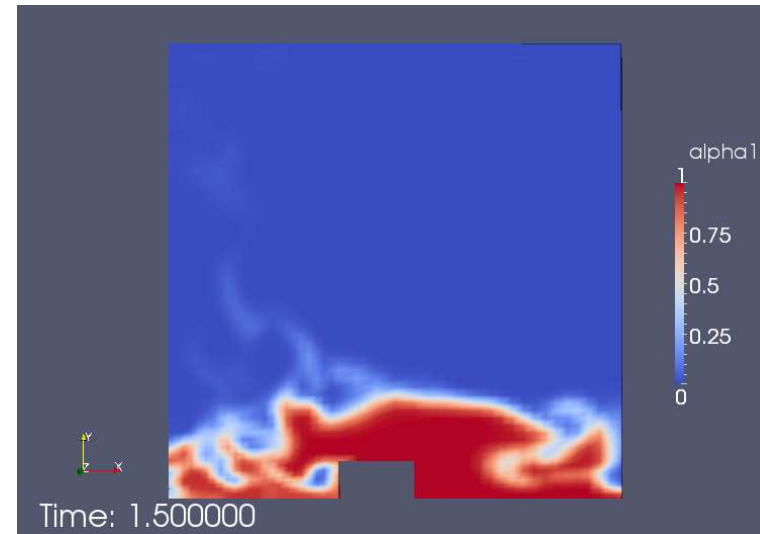
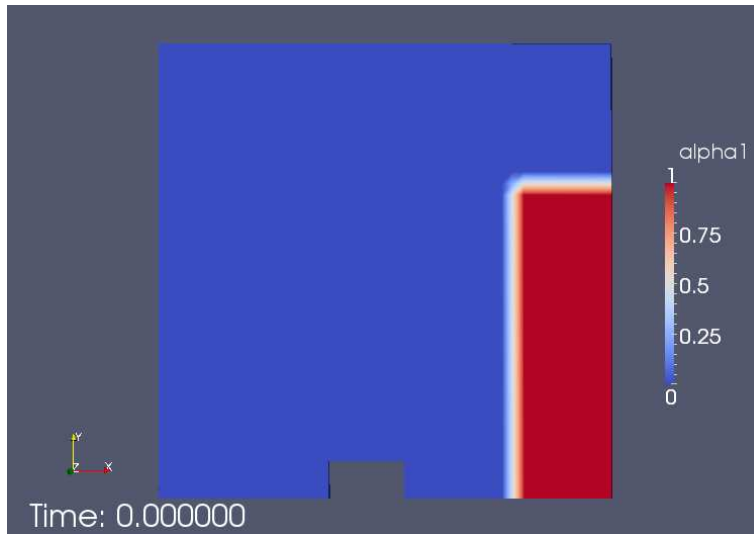
- Streamlines with tube filter of velocity  $U_x$  along the middle of the channel.
- Added two plates and a plot of the velocity  $U_x$  at  $x = 10$ .

## Modified damBreak

Changes to the damBreak case:

- Upper boundary to a inlet with velocity  $U = (2 \ -2 \ 0)$
- Size and placement of water column. Also a new viscosity,  $\nu = 1e - 07$ .
- Size of obstacle.
- Longer run Time,  $T = 1.5$  s.

Modified damBreak





Modified damBreak

