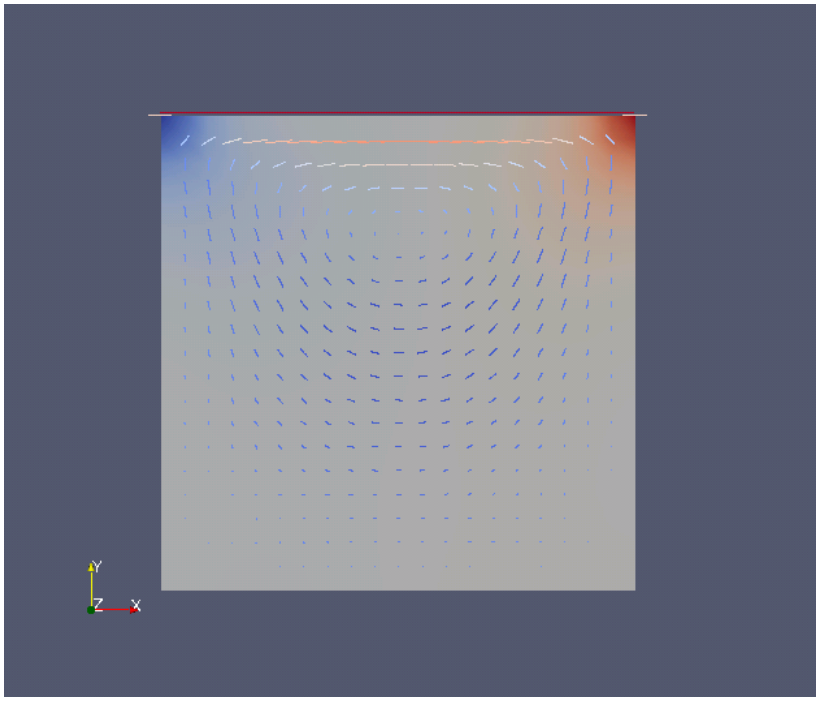
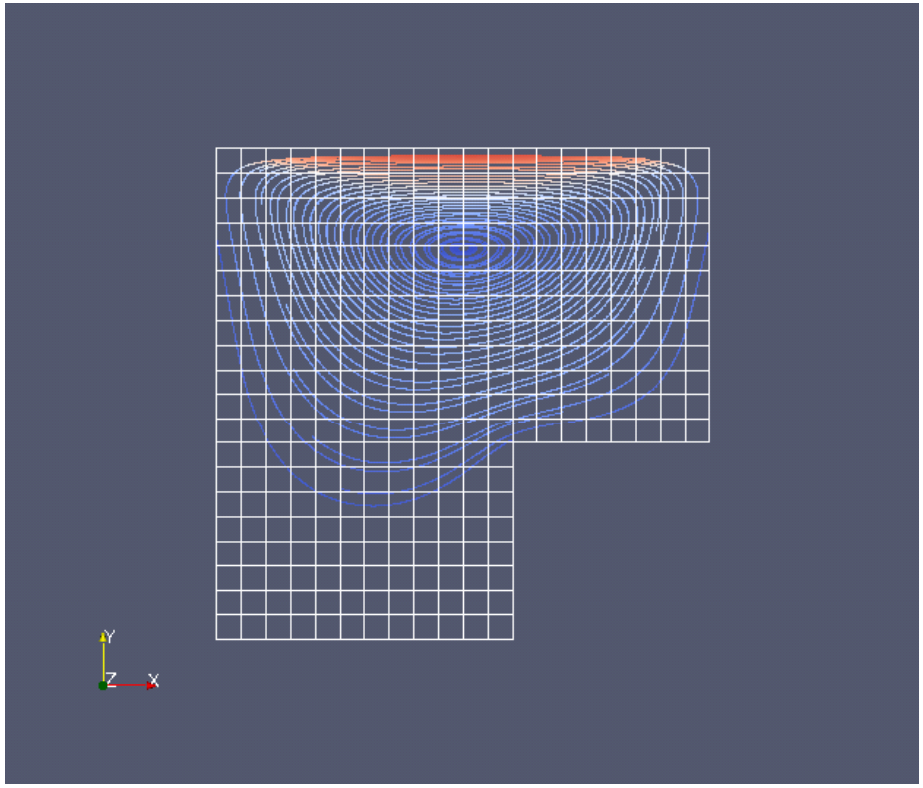
# cavity



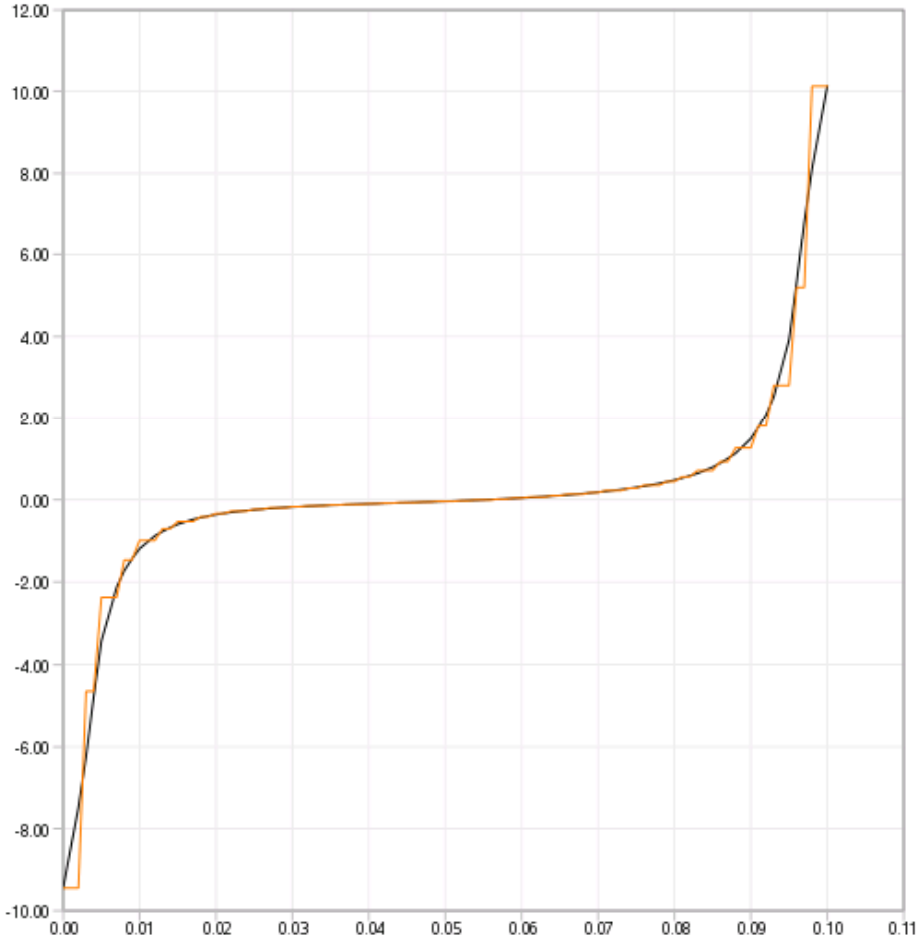
- make a slice in z plane
- implement Glyph filter

# cavityClipped



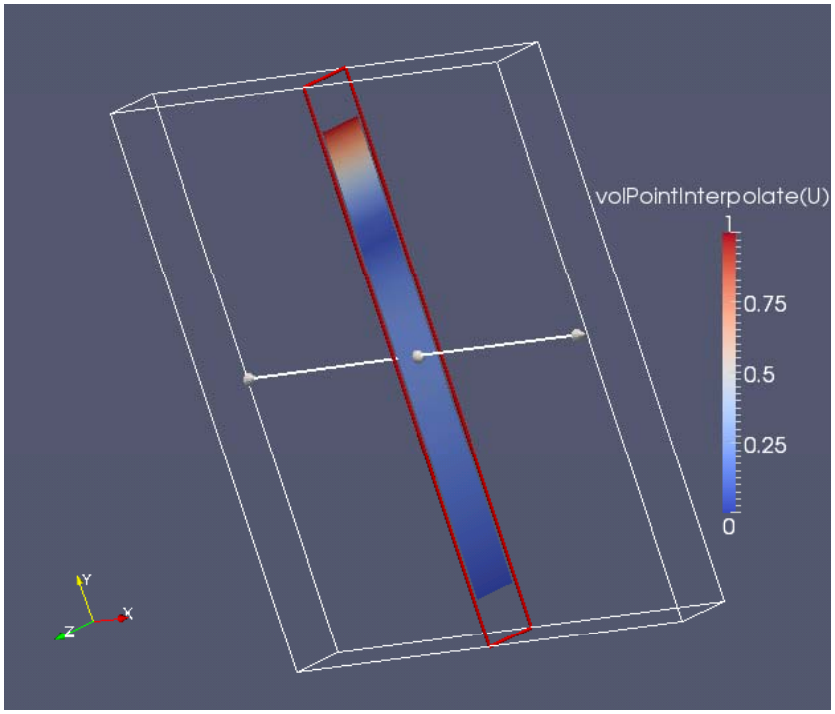

•Streamline coloured by velocity

# cavityFine



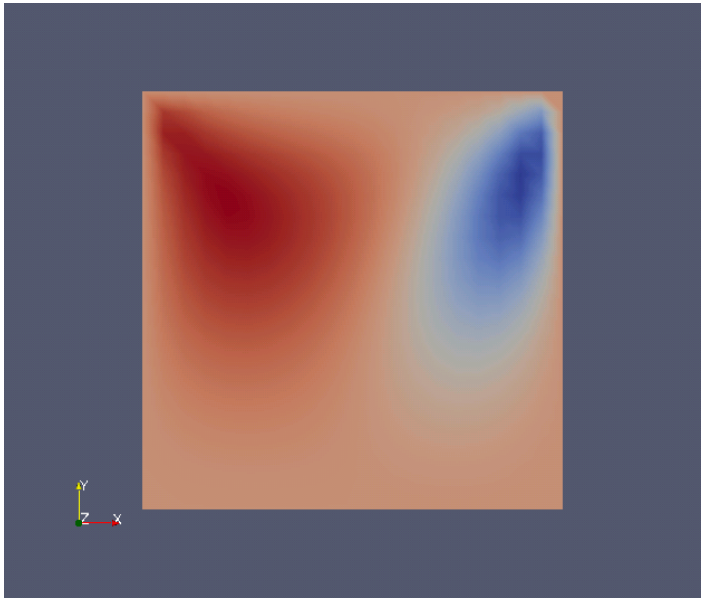

• pressure and pressure interpolation plot along a line passing (0 0.1 0) and (0.1 0.1 0).

# cavityGrade

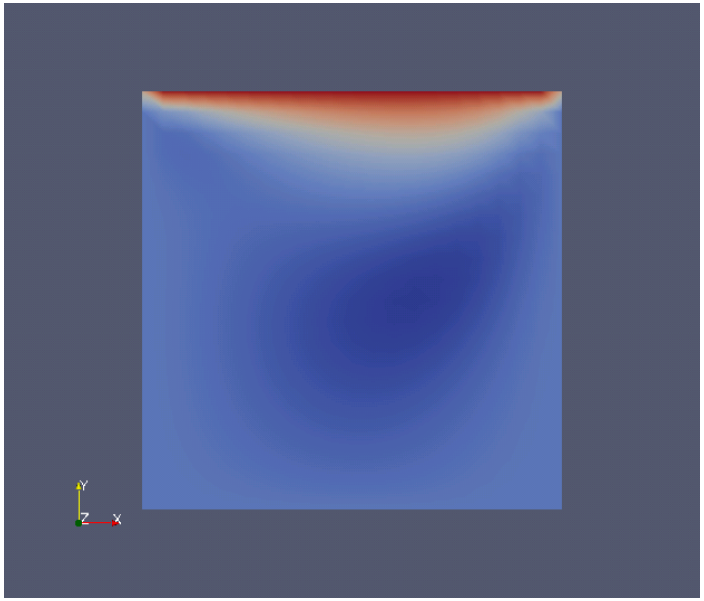



•Using slice filter in x-plane

# cavityHighRe

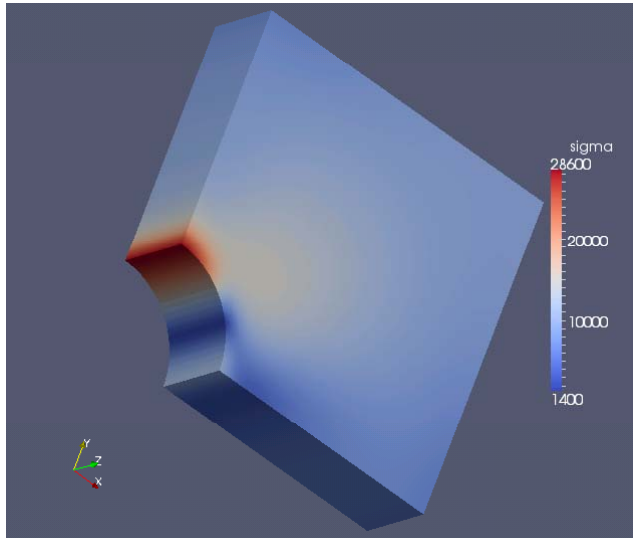


•Coloured by velocity along y-direction

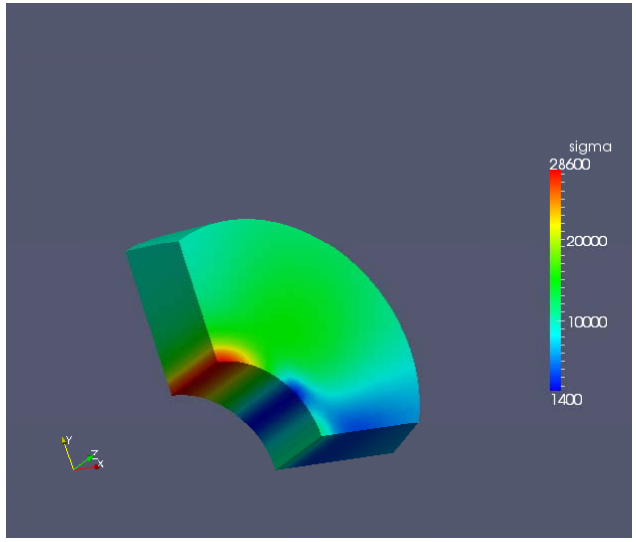


•Coloured by velocity along x-direction

# plateHole

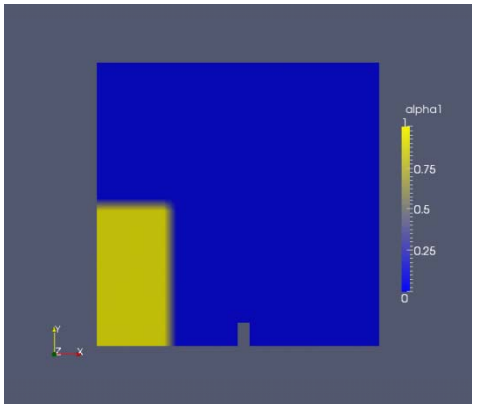



•sigma

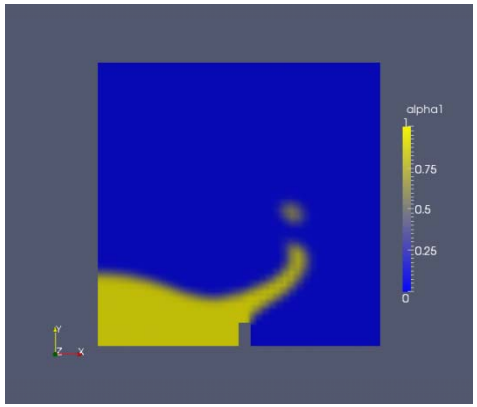



•Using clip-sphere filter

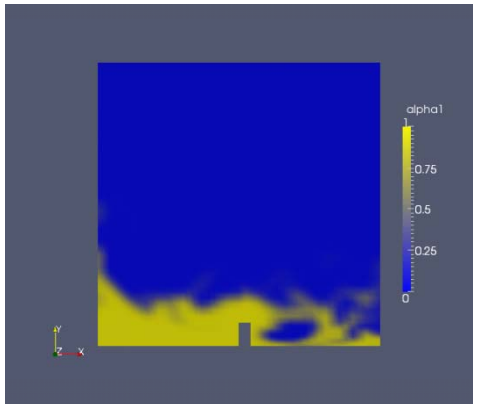
# damBreak




•Alpha1 at t=0s

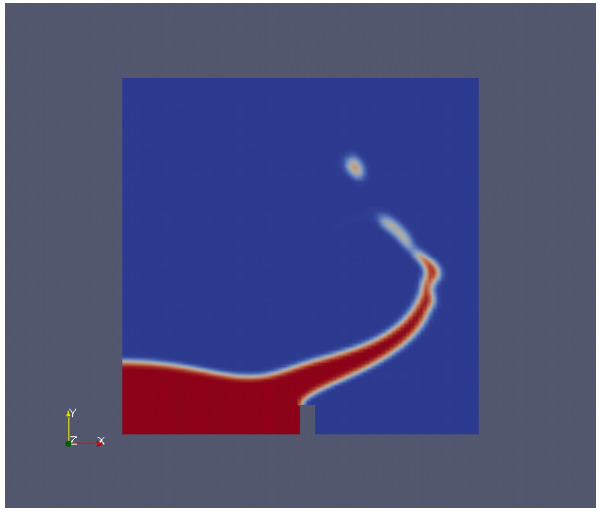



•Alpha1 at t=25s

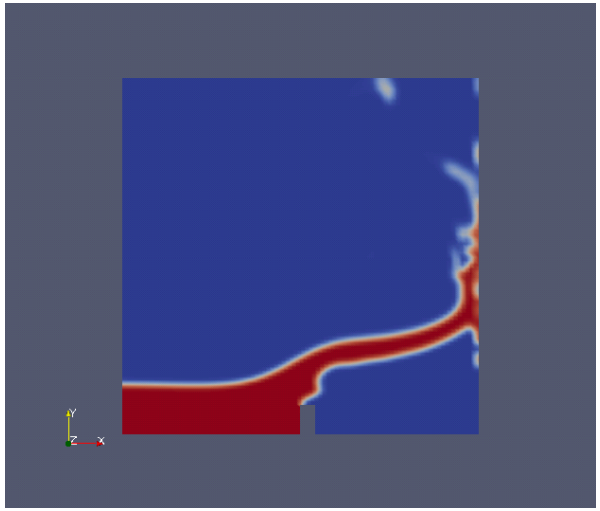



•Alpha1 at t=60s

# damBreakFine

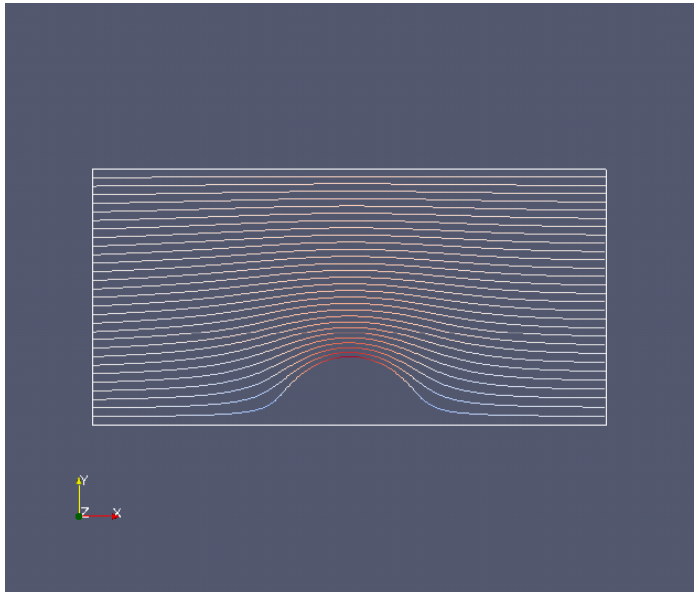


•Alpha1 at t=30s

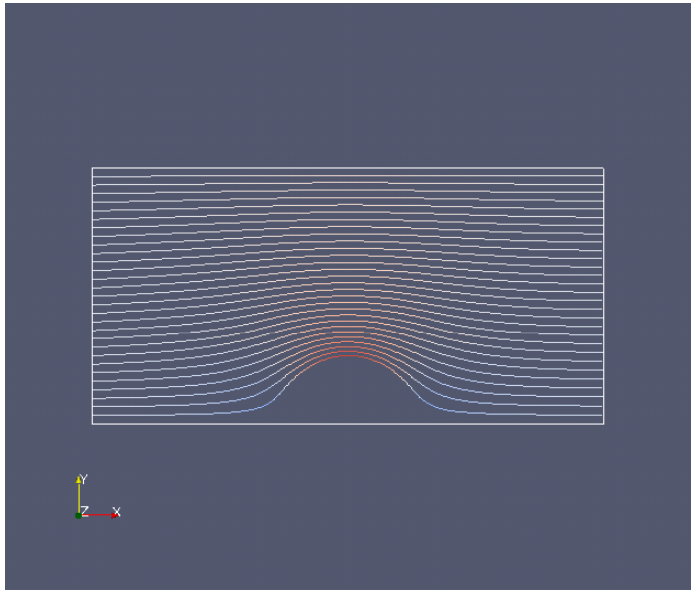


•Alpha1 at t=40s

# cylender

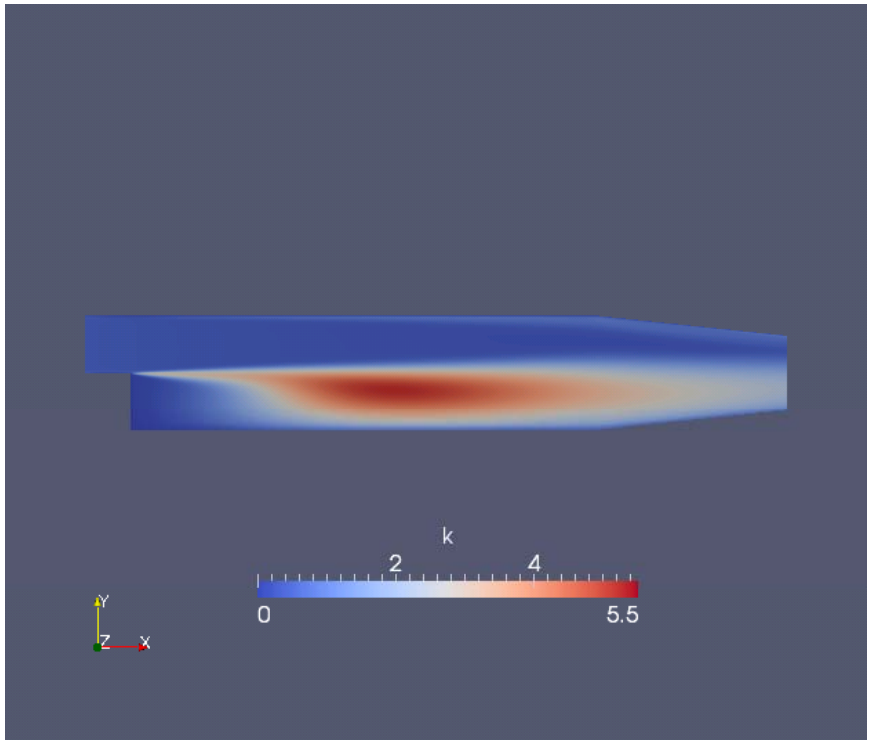


(a) Non-orthogonal correction 3



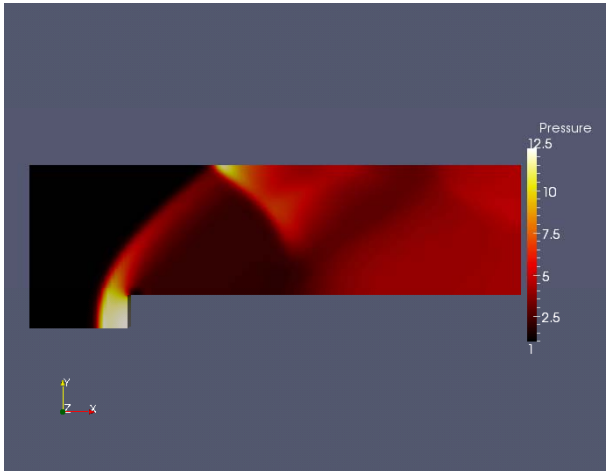
(b) analytical solution

# pitzDaily

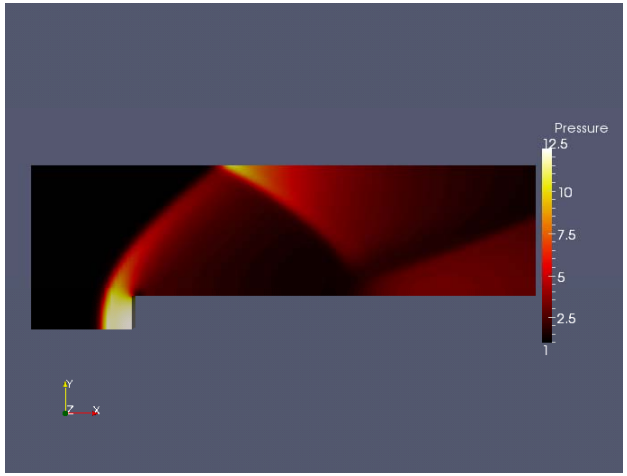



The value of k is illustrated

# forwardStep

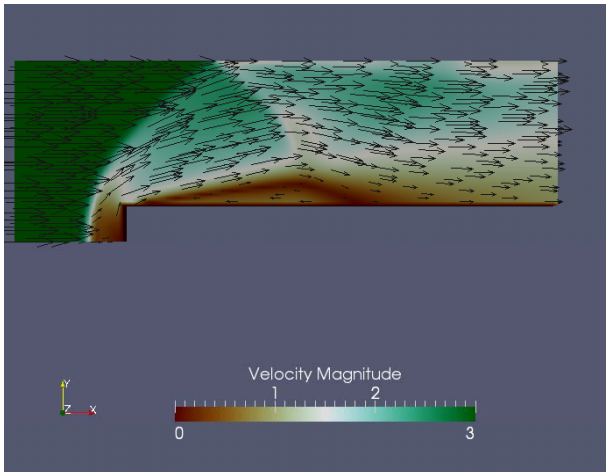



(a) Pressure at t=2.5

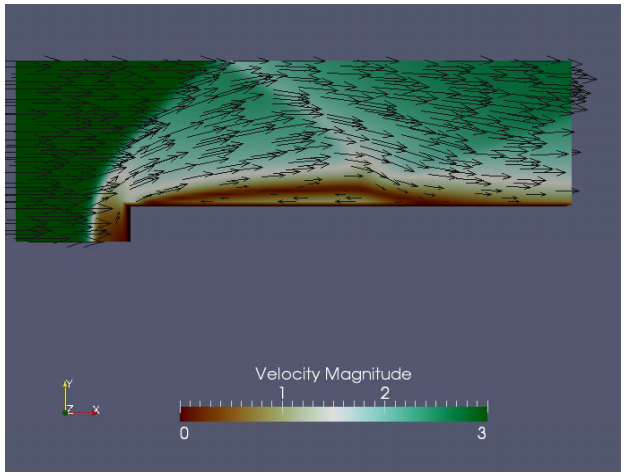



(b) Pressure at t=10

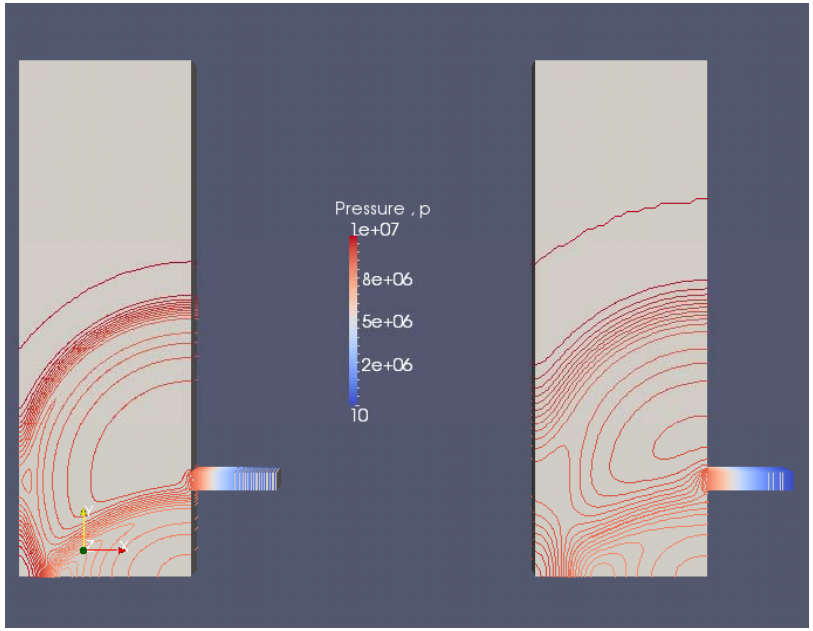
(c) Velocity at t=2.5



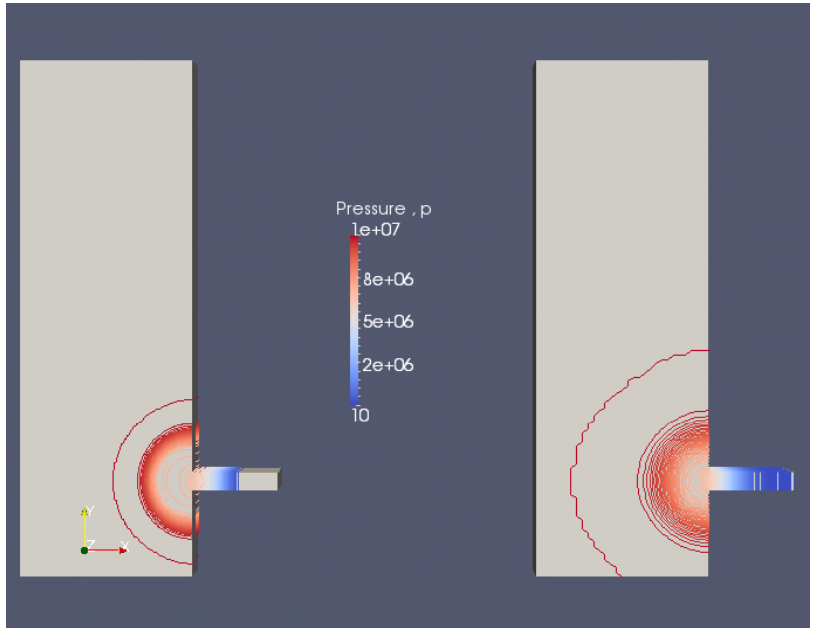

(d) Velocity at t=10



# decompressionTank & decompressionTankFine



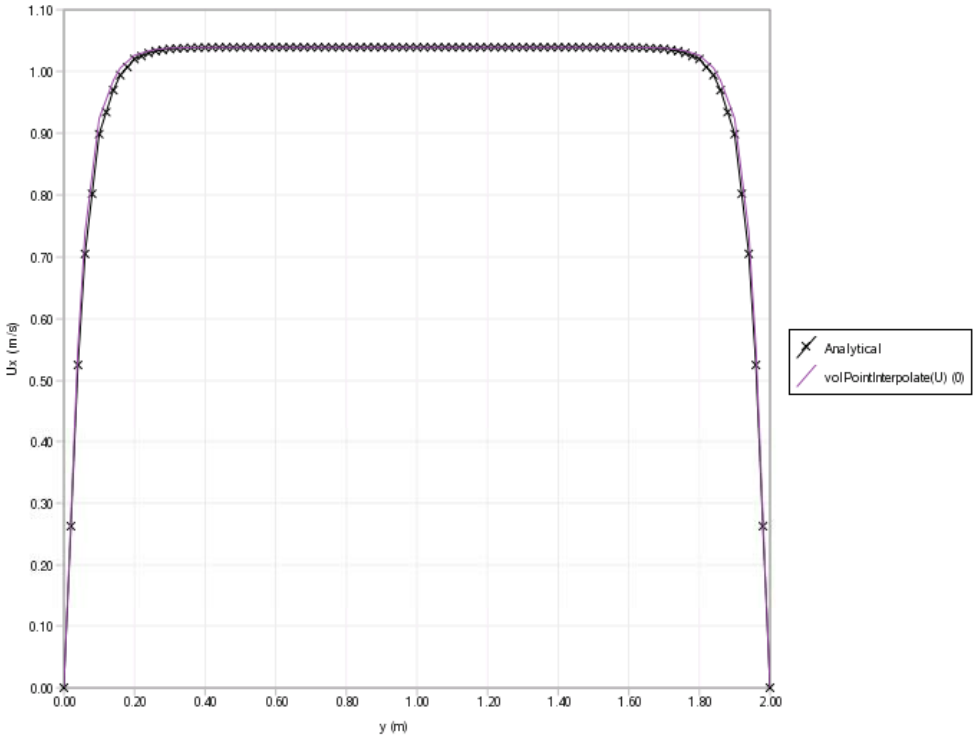

(a) Time .0001




(b) Time .00005

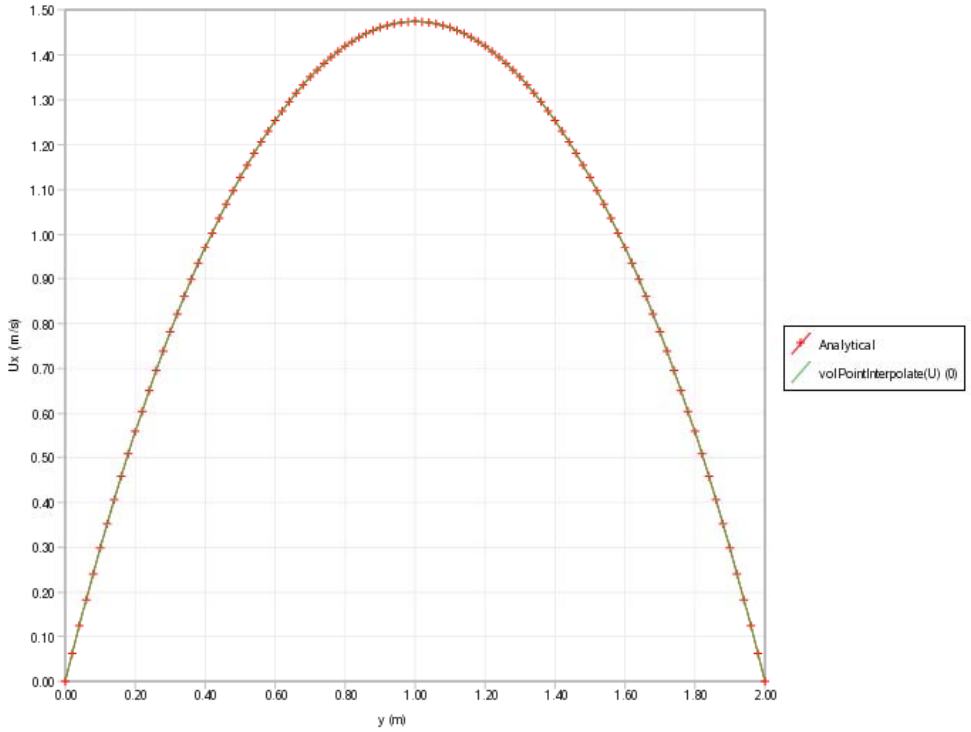
- The left case in each picture refers to decopressionTank and the right one refers to decopressionTankFine
- Both cases are showed at the same screen by translating the first one 0.3 in x direction and using “touch” command to create an ParaFoam file for the other and open it in the same paraFoam.

# hartman



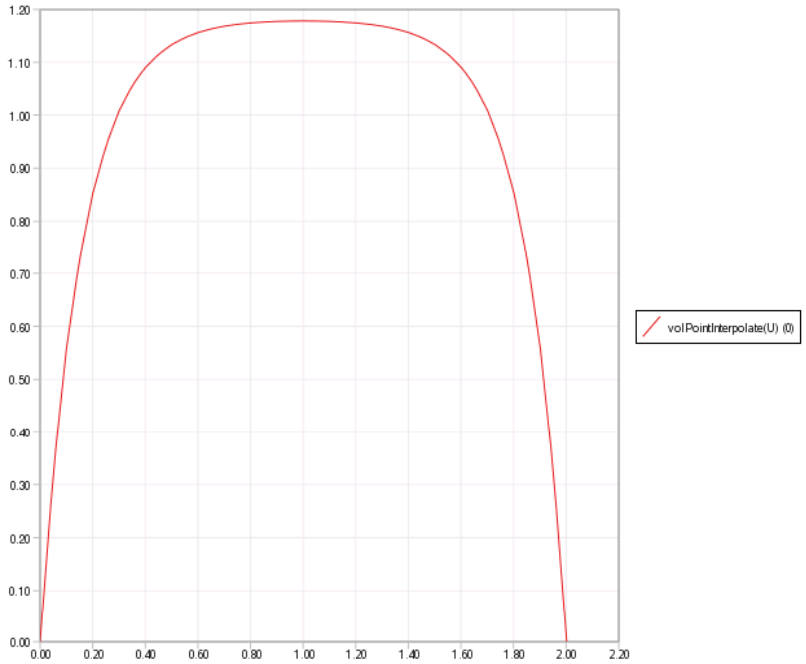

- The velocity profile over the line from the center of x in y-direction for both analytical and numerical
- By=20
- The analytical one is done by calculation filter with this equation:
- 1.03896*(cosh(20)-cosh(20*coordsY))/(cosh(20)-1) when M=20

# hartman




- The velocity profile over the line from the center of x in y-direction for both analytical and numerical
- By=1
- The analytical one is done by calculation filter with this equation:
- 1.47428*(cosh(1)-cosh(1*coordsY))/(cosh(1)-1) when M=1

# hartman




- The electrical conductivity is changed from 1 to 0.1
- Sigma can be changed in transportProperites file