

conservation finite differences

注意正应力和剪应力在交替网格上定义在不同的节点上。

for 1D incompressible Stokes equation:





错误的差分格式：



正确的：



deviatoric stress used in Stokes equation is the same for node2 and node3:



so that is conserved between two nodes.

如果黏度没有直接给定，则可以用下式计算；



扩展到2D:



x-Stokes equation





y-Stokes equation

