## 使用形式:

```
# Initial linear slab viscosity setup
stokes = uw. systems. Stokes (
                               velocityField = velocityField,
                               pressureField = pressureField,
                               voronoi_swarm = swarm,
                               conditions = periodicBC,
                               fn_viscosity = viscosityMapFn,
                               fn_bodyforce = buoyancyFn )
# Create solver & solve
solver = uw. systems. Solver(stokes)
solver. solve (nonLinearIterate=True)
```

## function:

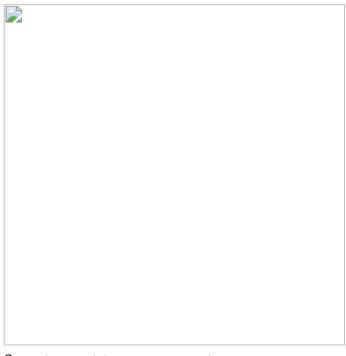
underworld. systems. Solver

## class:

1-underworld. systems. AdvectionDiffusion: advection-diffusion equation的离散 representation;

uses the Streamline Upwind Petrov Galerkin SUPG method to integrate through time: 随时间积分

Underworld uses the AdvectionDiffusion system to solve the temperature field given heat transport through the velocity field



2-underworld. systems. Stokes:

stokes流体方程的离散representation,混合有限元方法构造线性方程系统,这样可以用 system. Solver。The underlying element types are determined by the supporting mesh used for the 'velocityField' and 'pressureField' parameters。

3-underworld. systems. TimeIntegration

4-underworld. systems. SwarmAdvector