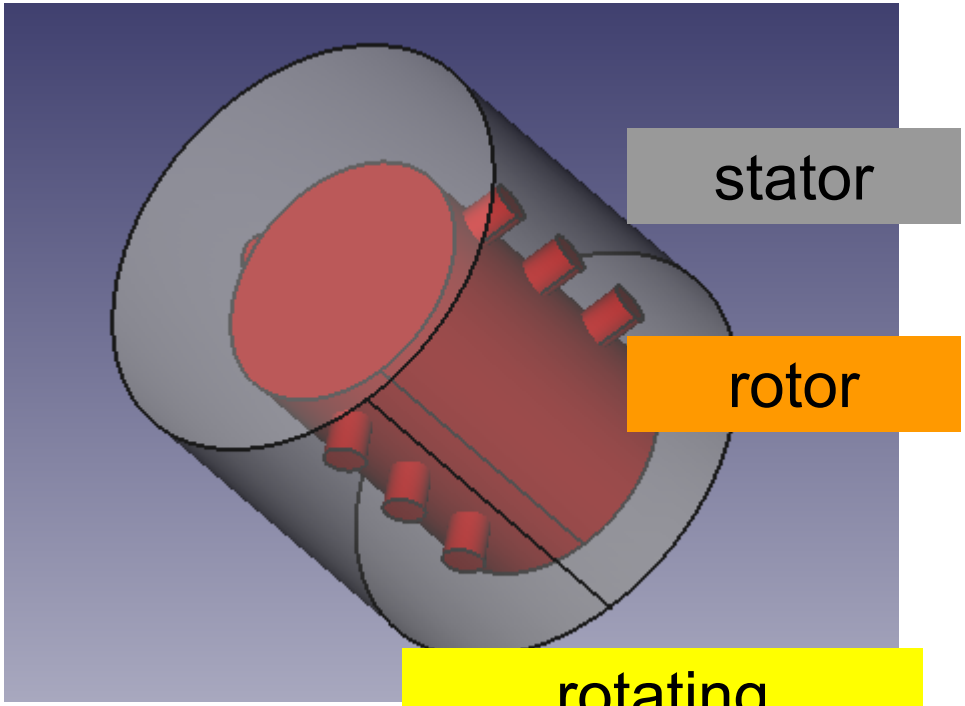
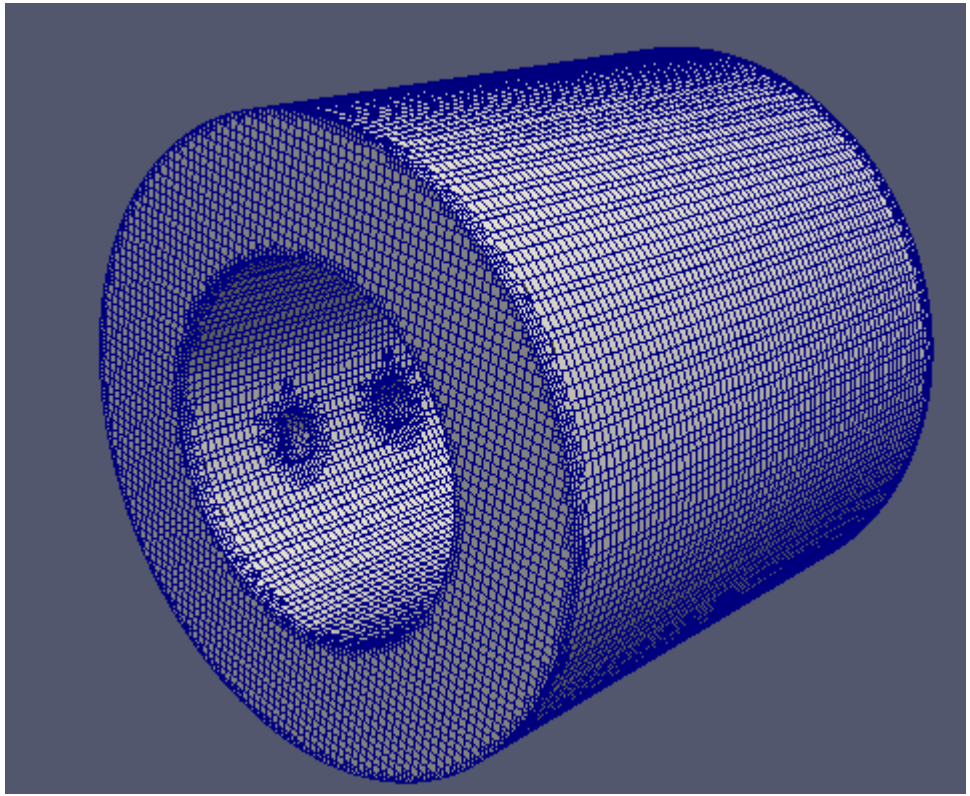
interDyMFoam /stirredMillSnappy

model




```
20
21 boundaryField
22 {
23
24     stator
25     {
26         type            fixedValue;
27         value           $internalField;
28     }
29     rotor
30     {
31         type            rotatingWallVelocity;
32         origin          (0 0 0);
33         axis            (0 0 1);
34         omega           -62.8;
35         value           $internalField;
36     }
37 }
```

snappyHexMesh



nPoints:116248
nCells:79353

cellZones

```
18 1
19 (
20 rotating
21 {
22     type cellZone;
23 cellLabels      List<label>
24 79353
25 (
26 0
27 1
28 2
29 3
30 4
```

tutorials/multiphase/interDyMFoam/ras/mixerVesselAMI

mixerVesselAMI

p_rgh

```
16
17 dimensions      [1 -1 -2 0 0 0 0];
18
19 internalField   uniform 1.25e5;
20
21 boundaryField
22 {
23     ".*"
24     {
25         type            fixedFluxPressure;
26         phi             phiAbs;
27         value           $internalField;
28     }
29
30     outlet
31     {
32         type            fixedValue;
33         value           $internalField;
34     }
35
36     "AMI.*"
37     {
38         type            cyclicAMI;
39         value           $internalField;
40     }
41 }
```

stirredMillSnappy

p_rgh

```
20
21 boundaryField
22 {
23
24     stator
25     {
26         type            fixedFluxPressure;
27         phi             phiAbs;
28         value           $internalField;
29     }
30     rotor
31     {
32         type            fixedFluxPressure;
33         phi             phiAbs;
34         value           $internalField;
35     }
36 }
37
```

fvSolutions

mixerVesselAMI

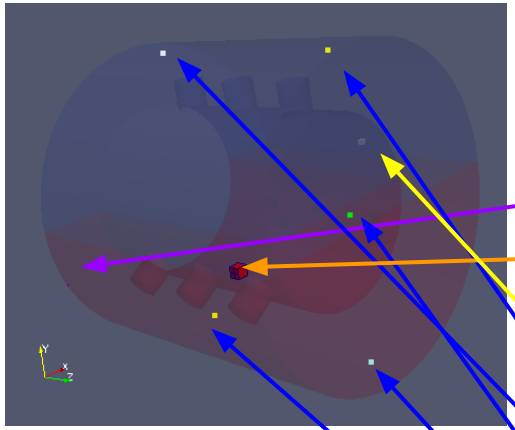
fvSolution

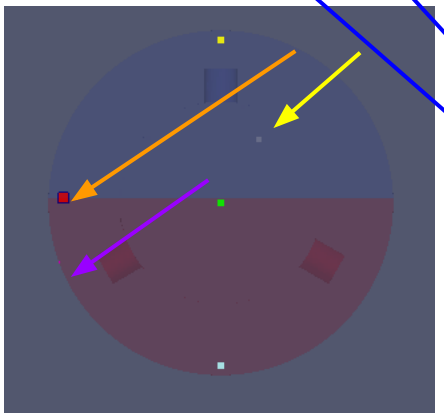
```
68
69 PIMPLE
70 {
71     momentumPredictor   yes;
72     correctPhi          yes;
73     transSonic          no;
74     nOuterCorrectors    1;
75     nCorrectors         3;
76     nNonOrthogonalCorrectors 0;
77     nAlphaCorr          1;
78     nAlphaSubCycles     2;
79     cAlpha              1;
80 }
```

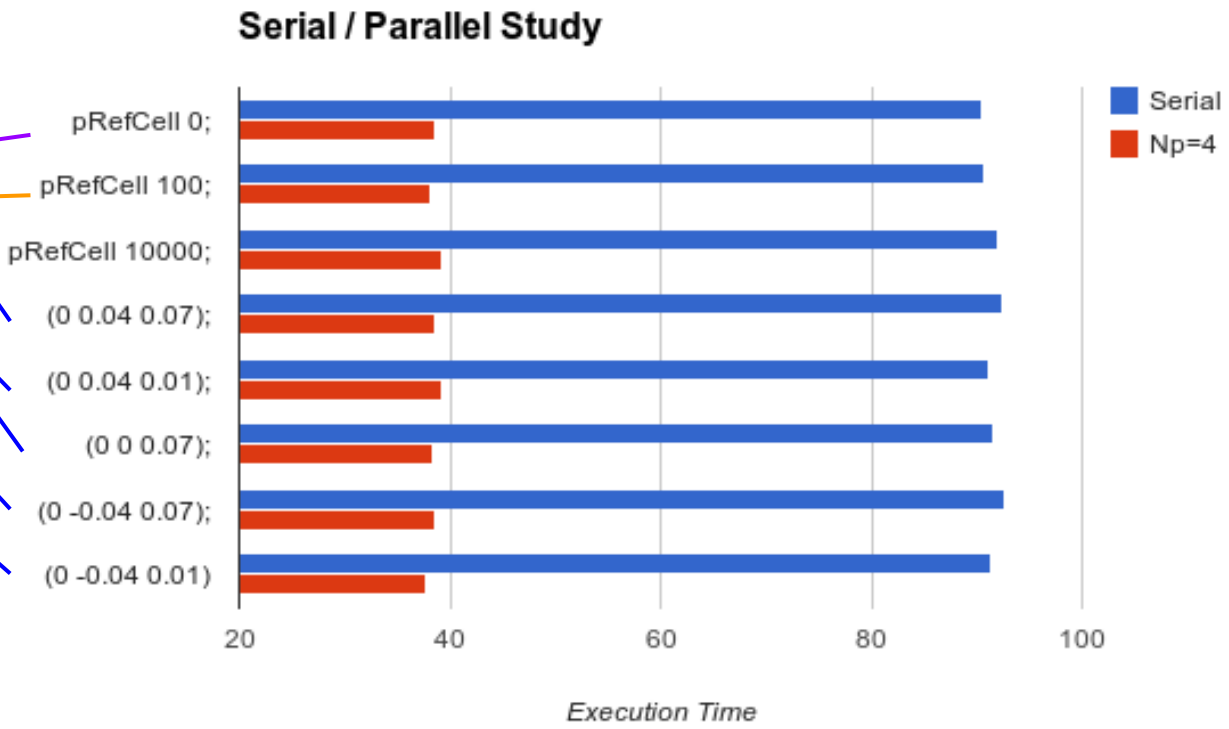
stirredMillSnappy

fvSolution

```
68
69 PIMPLE
70 {
71     momentumPredictor   yes;
72     correctPhi          yes;
73     transSonic          no;
74     nOuterCorrectors    1;
75     nCorrectors         3;
76     nNonOrthogonalCorrectors 0;
77     nAlphaCorr          1;
78     nAlphaSubCycles     2;
79     cAlpha              1;
80     pRefCell        0;              //0
81 //    pRefCell        100;            //1
82 //    pRefPoint       (0 0 0.07);     //2
83 //    pRefPoint       (0 -0.04 0.01); //3
84 //    pRefPoint       (0 0.04 0.01);  //4
85 //    pRefPoint       (0 -0.04 0.07); //5
86 //    pRefPoint       (0 0.04 0.07);  //6
87 //    pRefCell        10000;              //7
88     pRefValue       0;
89 }
90
```






Serial / Parallel Study
pRefCell 0;
pRefCell 100;
pRefCell 10000;
(0 0.04 0.07);
(0 0.04 0.01);
(0 0 0.07);
(0 -0.04 0.07);
(0 -0.04 0.01)
Serial
Np=4
20
40
60
80
100
Execution Time