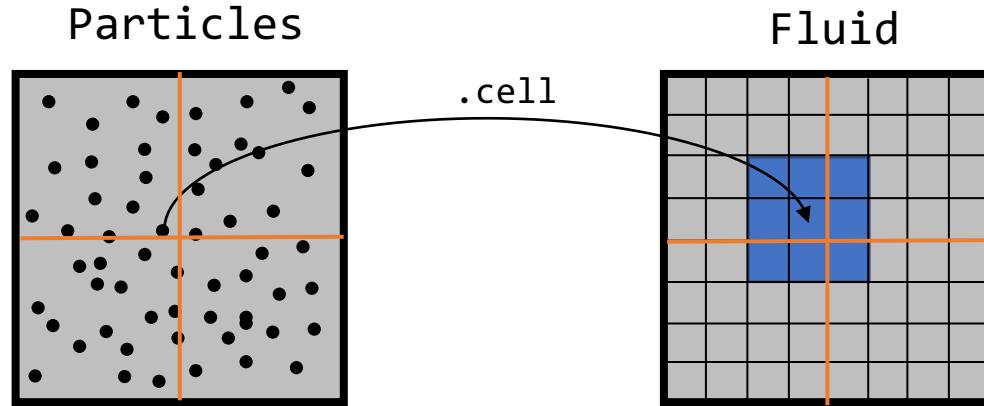


Particles: Fluid Coupling



```
task f2p(Particles, Fluid)
var c = Particles[p].cell
var v = Interpolate(
    Fluid[c+{-1,-1}].v,
    ...,
    Fluid[c+{+1,+1}].v
)
Particles[p].DvDt = (v - Particles[p].v)/dt
```

Assumes
 $p \in \text{Particles} \Rightarrow p.\text{cell} \in \text{Fluid}$

```
task p2f(Particles, Fluid)
for p in Particles do
    var c = Particles[p].cell
    Fluid[c].DvDt  $\oplus=$ 
        Particles[p].DvDt
```

Particles: Cross-Tile Movement

