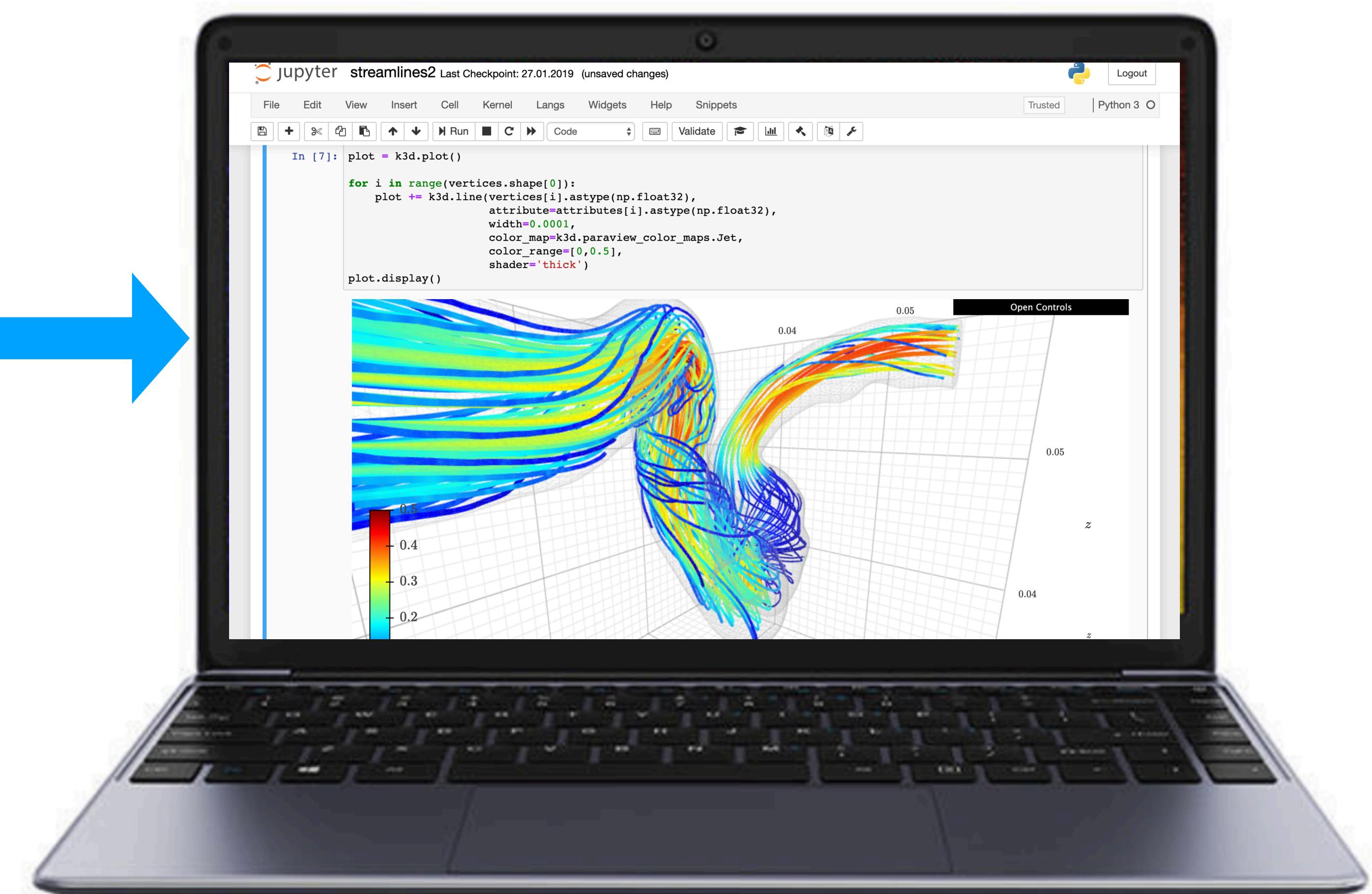




OpenDreamKit

K3D-jupyter, visualization VRE

Notebook with K3D-jupyter

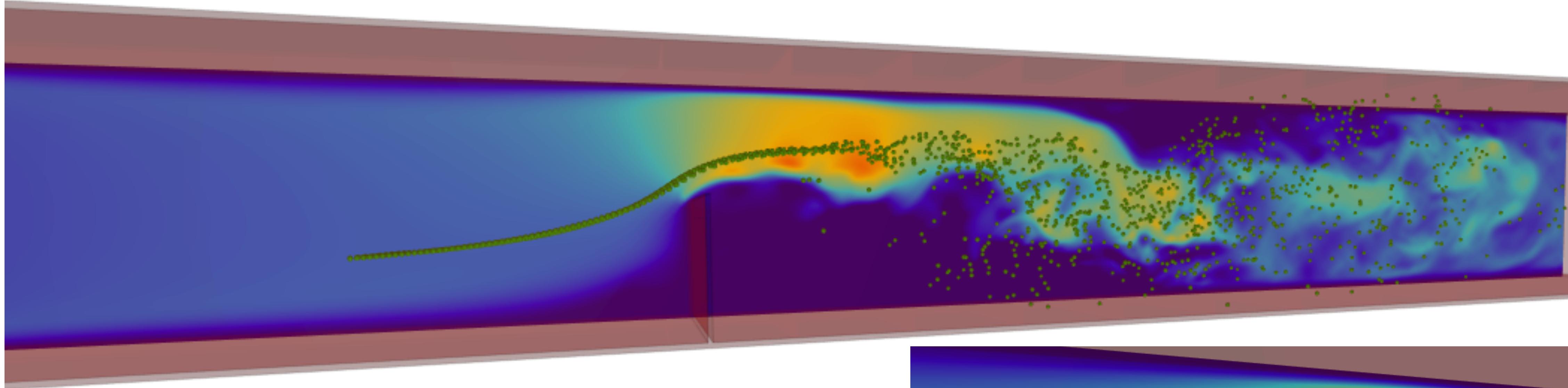


**Fluid dynamics simulation running on
HPC resources
at University of Silesia
Poland**



OpenDreamKit

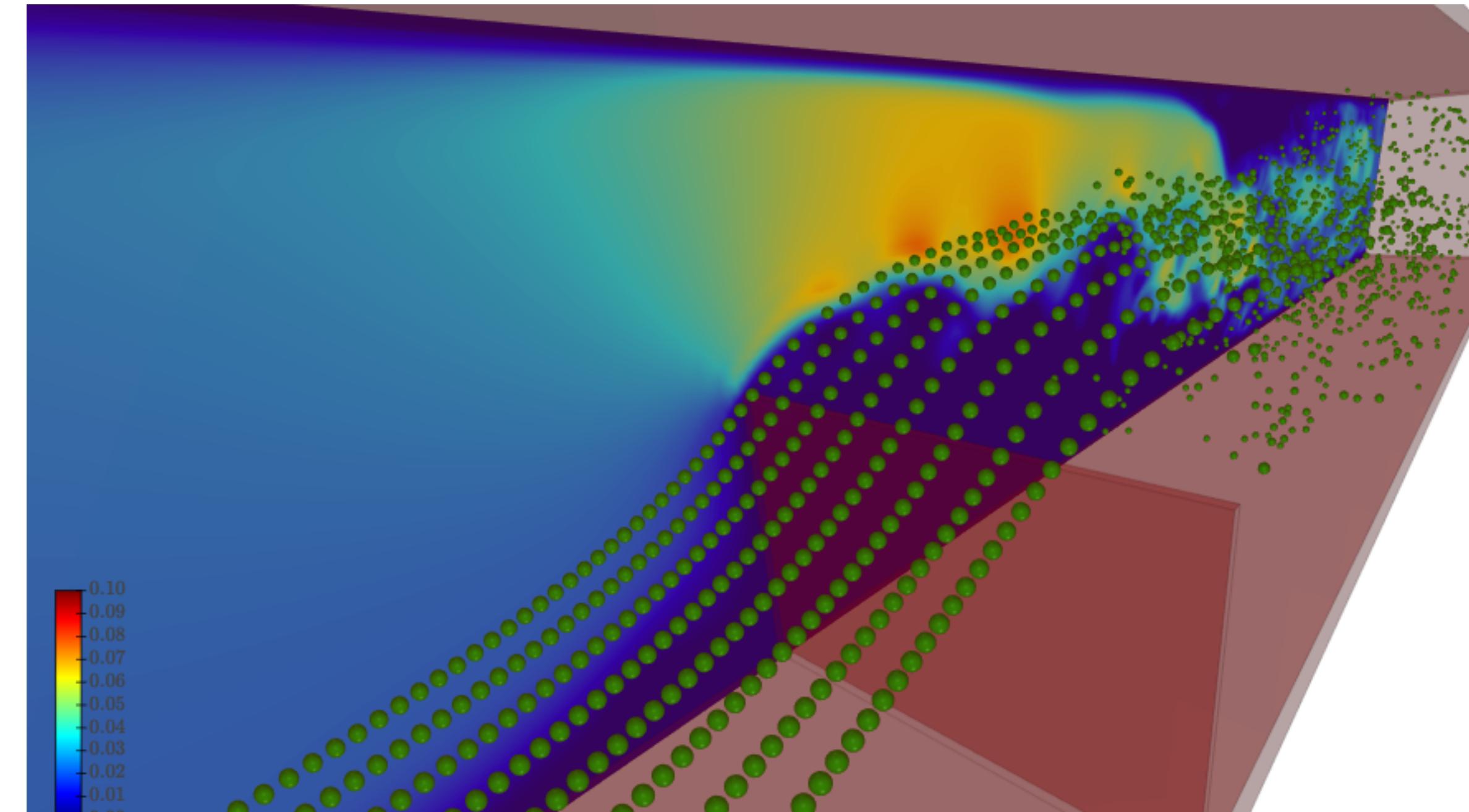
Real time visualisation



```
plt_slice.attribute = runner._sim.vx[:,gy//4,:,:].copy()
```

Executed on HPC

ipywidgets communication





OpenDreamKit

Volume rendering

- medical imaging
- field of depth, shadows
- Cinematic rendering in hi-resolution
(slow, but programmable)
- Structured mesh only, will be extended
to chunk-like format soon.
- Direct visualisation of fluid dynamics -
scalar fields

