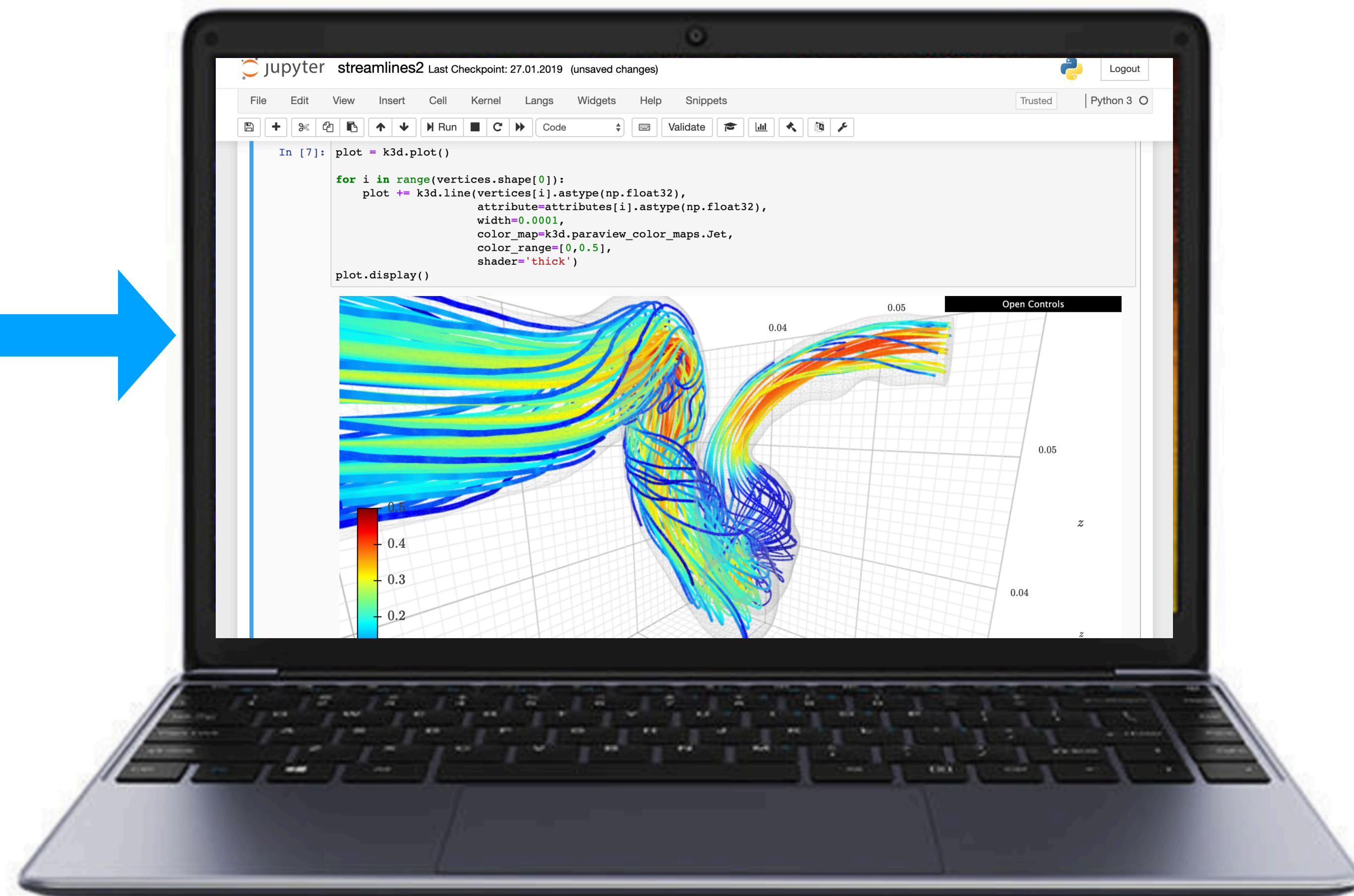


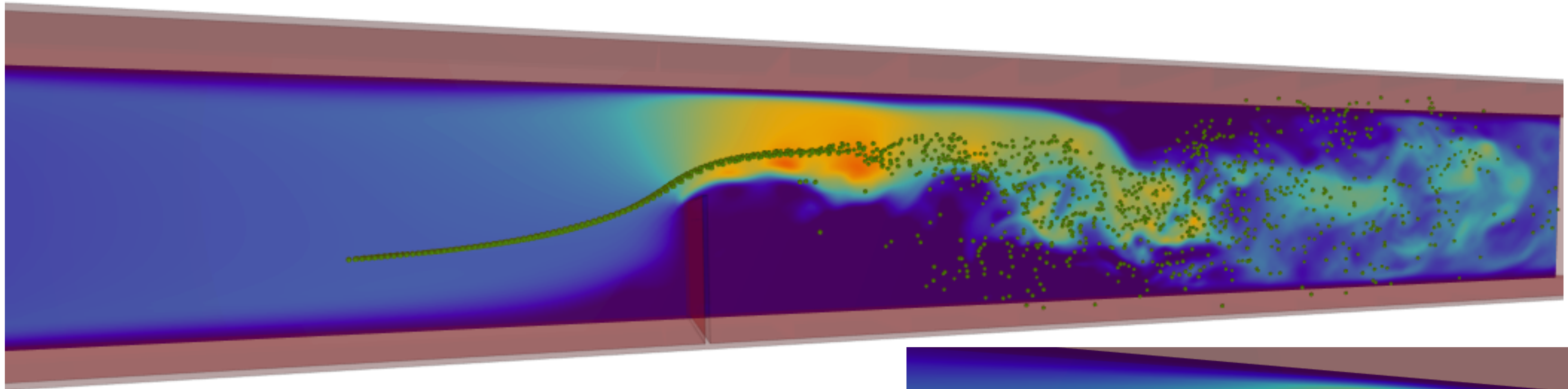
# K3D-jupyter, visualization VRE

## Notebook with K3D-jupyter



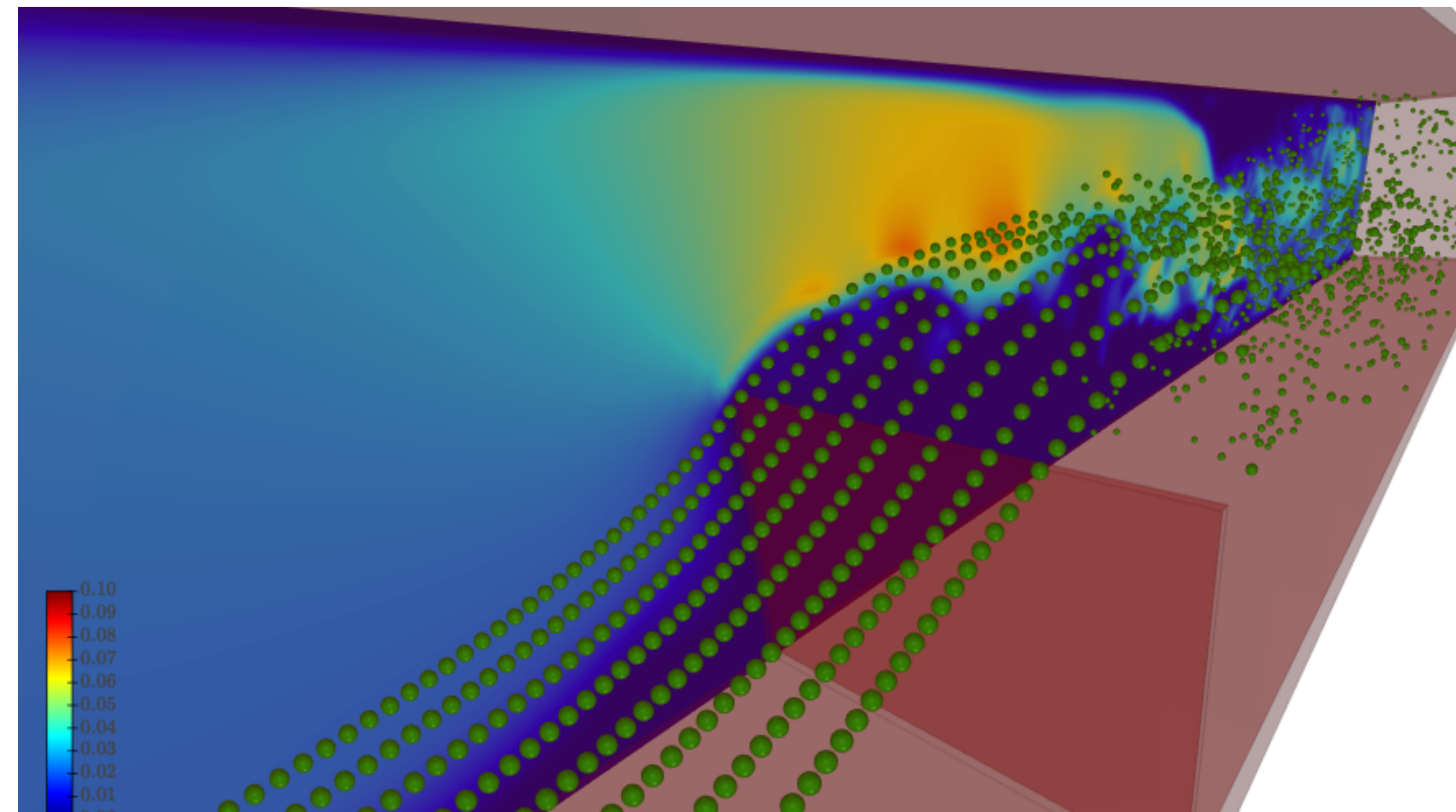
**Fluid dynamics simulation running on  
HPC resources  
at University of Silesia  
Poland**

# Real time visualisation



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

Executed on HPC  
ipywidgets communication



# Volume rendering



OpenDreamKit

- 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

