Paraview GUI commands

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Tags	

How to use Python macro

1. load macro
2. check the macro is added in Paraview. You should see a new button with the name of the macro function on it.
3. press the button and run the macro

List of Macro

visualiseVTK.py - takes vtk or vtk.series file and creates tensorglyphs with color

Parameters to adjust

particle size

Particle size is determined by $Radius \times ScaleFactor$

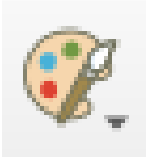
resolution

Resolution defines how many points are used to plot an ellipsoid. There are 2 parameters, theta and phi.

Total number of points on an ellipsoid: $theta \times phi - (phi - 1) \times 2$

color

background, axis grid, etc - you can adjust back ground color by clicking “color palette icon”



Video

To use the “time inspector feature” in Paraview, the file needs to be in vtk.series format. vtk.series is simply a json with the name of the file and the timestep it corresponds to.

ellipsoids.vtk.series

```
{
  "file-series-version" : "1.0",
  "files" : [
    { "name" : "data/Fig1E.vtk", "time" : 0 },
    { "name" : "data/Fig1F.vtk", "time" : 1 },
    { "name" : "data/Fig1G.vtk", "time" : 2 },
    { "name" : "data/Fig1H.vtk", "time" : 3 }
  ]
}
```

The program uses sort() to sort the files in the directory by their names and put them into a vtk.series file in ascending order.

Users can change the order of vtk files, time manually presented in vtk.series.

save animation

https://docs.paraview.org/en/v5.8/UsersGuide/savingResults.html#:~:text=To save an animation as,and which format to use.