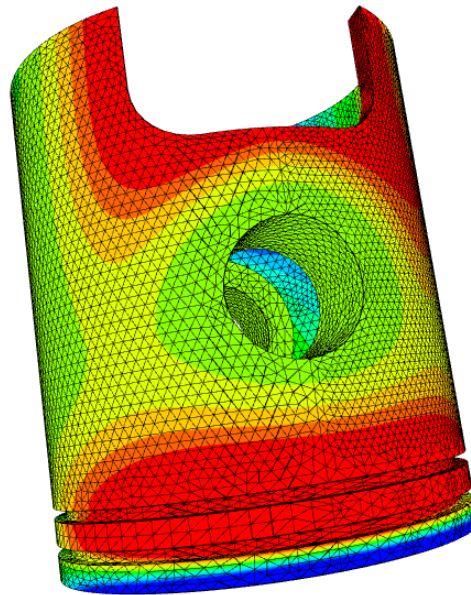




The extensible scientific 3D mesh visualization



SciviJS Live Demonstration



Introduction

- SciviJS = 3D viz of mesh fields using local GPU
- Demonstration : <https://demo.logilab.fr/SciviJS/>
- Typical usage: Finite Element solver result viz
- Remote viz (VNC-like) vs. local viz
(remote: big meshes, high latency; local: smaller meshes, low latency)



Technology layers

- Browser (WEBGL) - Three.js
- Use of Threejs Node material that helps generate GLSL (GPU) code
- SciviJS lib (no GUI)
- SciviJS_GUI (DOM widgets)
- SciviJS_jupyter (use of scivijs_gui in the notebook)



SciviJS structure

- Plug-in system
- DataBlock, PlugInBlock
- 7 built-in PlugInBlocks



SciviJS extensibility

- Write your own plugin
- Registers
- Existing plugin example