

# Bringing Experiment Software to the Web with VISPA



## Architecture



### *Client*

- JavaScript/HTML
- Standard web browser
- Latest web technologies
- AMD/RequireJS, WebGL, WebSockets, Bootstrap

### *VISPA Server*

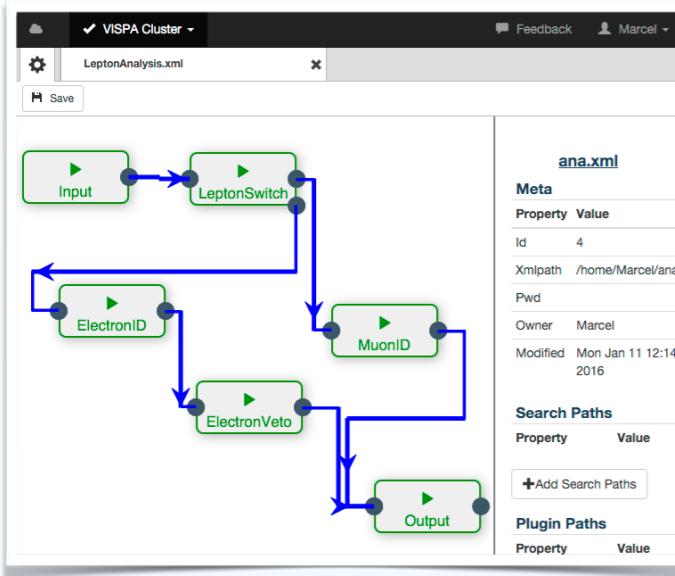
- Python
- Dispatches resources
- Provides extensions
- Code open-source

### *Workspaces*

- Any unix machine with Python
- Created by user via GUI
- Authentication with user login
- Transparent access and permissions

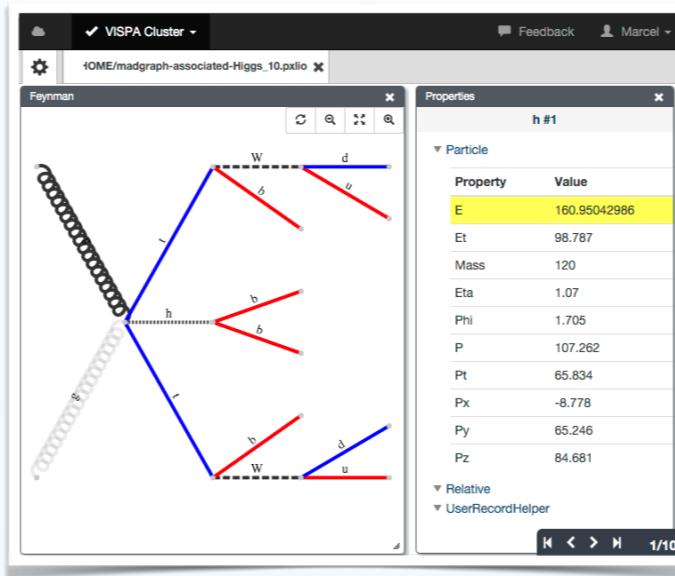
# Extensions

## Analysis Designer



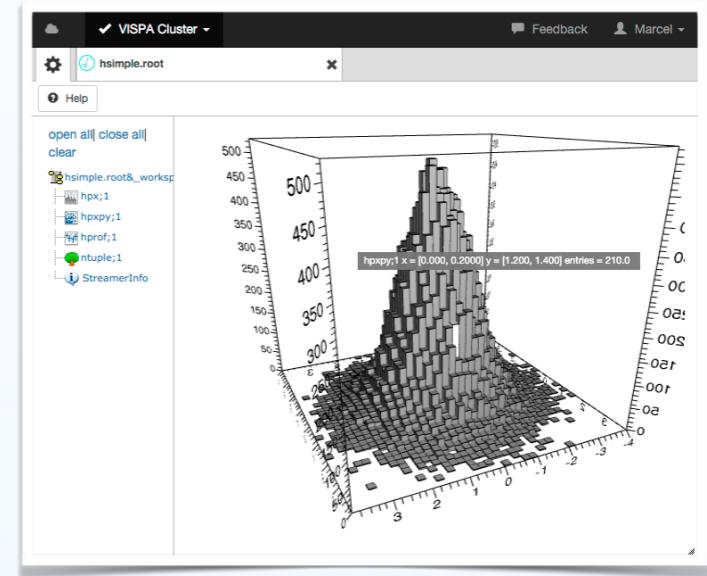
- Event-by-event data flow through chain
- Reusable C++ and Python modules
- Based on *Physics eXtension Library*

## Data Browser



- Interactive browsing of HEP event content
- Multiple data formats possible (e.g. LHE)
- Based on *Physics eXtension Library* (PXL)

## JSROOT



- ROOT file browser, interactive visualization
- Embedded **JSROOT** within thin code layer
- Benefits from dynamic resources (Workspaces)

also: *FileBrowser*, *CodeEditor*, *Terminal*, *JobDashboard*, ...