



Contribution ID: 156

Type: **Poster presentation**

Detector and Event Visualization with SketchUp at the CMS Experiment

Monday 14 October 2013 15:00 (45 minutes)

We describe the creation of 3D models of the CMS detector and events using SketchUp, a 3D modelling program. SketchUp provides a Ruby API with which we interface with the CMS Detector Description, the master source of the CMS detector geometry, to create detailed 3D models of the CMS detector. With the Ruby API we also interface with the JSON-based event format used for the iSpy event display to create 3D models of events. These models have many applications related to 3D representation of the CMS detector and events. Figures produced based on the models were used in conference presentations, paper publications, technical design reports for the detector upgrade, and other formal and informal documentation. Furthermore, several art projects, exhibitions, and outreach programs using the models are being planned. We describe technical implementation, show models created, and discuss present and future applications.

Primary author: SAKUMA, Tai (Texas A & M University (US))

Co-author: Dr MC CAULEY, Thomas (Fermi National Accelerator Lab. (US))

Presenter: SAKUMA, Tai (Texas A & M University (US))

Session Classification: Poster presentations

Track Classification: Event Processing, Simulation and Analysis