

# IGUANA Graphical User Analysis Project: New Developments

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IGUANA is a well-established generic interactive visualisation framework based on a C++ component model and open-source graphics products. We describe developments since the last CHEP, including: the event display toolkit, with examples from CMS and D0; the generic IGUANA visualisation system for GEANT4; integration of ROOT and HippoPlot with IGUANA; and a new lightweight and portable IGUANA Web browser client. Items covered include: the IGUANA design, API and scripting services; the Qt-based graphical user interfaces; OpenInventor/OpenGL 3D and 2D graphics; HEP-specific extensions for tracks, vertices, jets, etc.; vector graphics output; textual, tabular and hierarchical data views; the application control centre; and the novel Asynchronous Javascript/XML (AJAX) Iguana Web client. We demonstrate the use of IGUANA with several applications built for D0 and CMS, including displays of the first real data from the CMS Cosmic Challenge, using the recently re-engineered framework and Event Data Model.

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