

Exploring tomorrow's Monte-Carlo generators: MC Validation in ATLAS with PAVER

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Monte-Carlo (MC) simulations play a key role in high energy physics, for example at the ATLAS experiment. MC generators evolve continuously, so a periodic validation is indispensable for obtaining reliable and reproducible physics simulations. For that purpose, an automated and central validation system was developed: PMG Architecture for Validating Evgen with Rivet (PAVER). It provides an MC event generator validation procedure that allows a regular evaluation of new revisions and updates for commonly used MC generators in ATLAS as well as comparisons to measured data. The result is a robust, fast, and easily accessible MC validation setup that is constantly developed further. This way, issues in simulated samples can be detected before generating large samples for the collaboration, which is crucial for a sustainable and low-cost MC production procedure in ATLAS.

Alternate track

I read the instructions above

Yes

Authors: KRAUS, Johanna Wanda (Bergische Universitaet Wuppertal (DE)); ZHU, Junjie (University of Michigan (US))

Presenter: KRAUS, Johanna Wanda (Bergische Universitaet Wuppertal (DE))

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