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Corsika 8 - astroparticle simulation framework

Corsika 8 is a framework/toolkit for simulating the passage of particles through matter with a focus on applications in the context of astroparticle physics.

It provides a wide range of functionality including tracking, geometry, various media and many (external) models for different types of particle interactions and physics processes.

Processes that are currently included are electromagnetic interactions of leptons and hadrons, hadronic interactions and particle decays. The framework is thought to be a project of the wider astrophysics community. It is written and developed in modern C++ so to be readily extensible for new processes and applications.

In this contribution I will present the current status of the development, show predictions of various different applications implemented in the framework as well as comparisons of the air shower application with the legacy CORSIKA 7.

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