Contribution ID: **13** Type: **Talk**

Particle Flow Performance Studies at ILC

Wednesday 10 October 2012 14:00 (30 minutes)

The physics program of the planned International Linear Collider (ILC) focuses on very high precision in measurements and searches of physics beyond the Standard Model. This places a strong demand on the ILC detectors' performance. One of the competing detector designs is the International Large Detector (ILD) which has been particularly optimised for the concept of particle flow reconstruction, using a GEANT4 based detector simulation. In order to reduce the CPU runtime necessary to obtain the large statistics for studying the physics reach of the ILC, a faster and more economic solution is needed. The Simulation a Grande Vitesse (SGV) is a fast detector simulation which determines the tracker response for any given detector geometry from first principles. This talk will describe the parametrisations implemented in SGV with the goal of making the fast simulation compatible with the particle flow paradigm.

Primary author: CHERA, Madalina (DESY)

Presenter: CHERA, Madalina (DESY)

Session Classification: Student session