

ATLAS Monte Carlo group meeting, Dec 2 1999

I. Hinchliffe, LBNL

Monte Carlo Generators interface – Matt Dobbs

B-Decay packages – Maria Smizanska

ISAJET 7.44 / GENZ Interface – Jim Shank

Min Bias Event repository – K. Piotrkowski

Exact Parton calculations and Pythia — Rashid Mazini

Talks will be posted at <http://phyweb.lbl.gov/ianh/monte> in near future



Generator interface

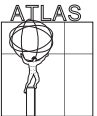
C++ interface to be used for exchange of information between generators and simulation

can merge inputs from different generators

details at http://home.cern.ch/m/mdobbs/www/C++/html_HepMC/index.html

Send comments to authors

Matt Dobbs and Jorgen Beck Hansen



Isagen

New ISAJET → GENZ interface

Chris Stowe and Jim Shank

Will be in release 0.36

WEB documentation at <http://www.cern.ch/Atlas/GROUPS/SOFTWARE/00/d>
enables ISAJET to be used to generate input for DICE



B-decay Packages

ATLAS has used Pythia – inadequate for B-physics

QQ (Cornell originated package) used by CDF

New BaBar package EvtGen – structured to allow many models
needs to be expanded to include Baryons and B_s . CDF will use this in
Run II

. Discussion of LHC needs and possible collaboration

Meeting of BPACK this afternoon.



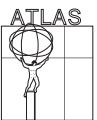
Min Bias

Critical to atlas because of pile-up

Large differences in current model predictions – see ATL-PHYS-99-019
(A. Kupko)

Proposal to maintain repository of events/description of appropriate settings

Webber will give talk on this at next meeting.



Integration of Parton calculations into showering MC's

Important for ATLAS

work in progress on incorporation of Parton code of Zeppenfeld and Rainwater – e.g $qq \rightarrow qqH \rightarrow qq\tau\tau$

