

EvtGen Workshop Introduction

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History

- Originally developed by Anders Ryd and David Lange for BaBar
- Became standard tool in almost every experiment
- The last "official" EvtGen release dates 2003
- Since then, was developed by every collaboration independently to include new decay models, update PDG values etc.
- In 2009, developments by BaBar, LHCb, Tevatron were merged by A. Ryd and D. Lange. Unfortunately, some bugs were introduced (e. g. Bs mixing, CP violation in $B \rightarrow J/\psi K_S$)
- Bug fixes required further modifications at LHCb
- Different experiments use different versions
- No official code source or support recently
- All this without good comprehensive documentation

Future

- Particle physics group at the University of Warwick decide to take “official” responsibility
- Long term aim is provide up-to-date version to all experiments
 - Should be easy to incorporate into experiments software
 - Easy to use with good documentation
 - Easy to extend with additional physics models
 - Have easy mechanism to port back developments from experiments
- Provide forum for discussions about future needs
- Possibly provide also user support

Today's goal

- Establish personal contacts between experiments and Warwick group
- Find out what issues different experiments have
- Find out what improvements experiments have which are not part of latest code merge
- Define near term and long term goals
- Find out what would experiments need in the future
- Possibly have prioritized list of wishes by the end of the day