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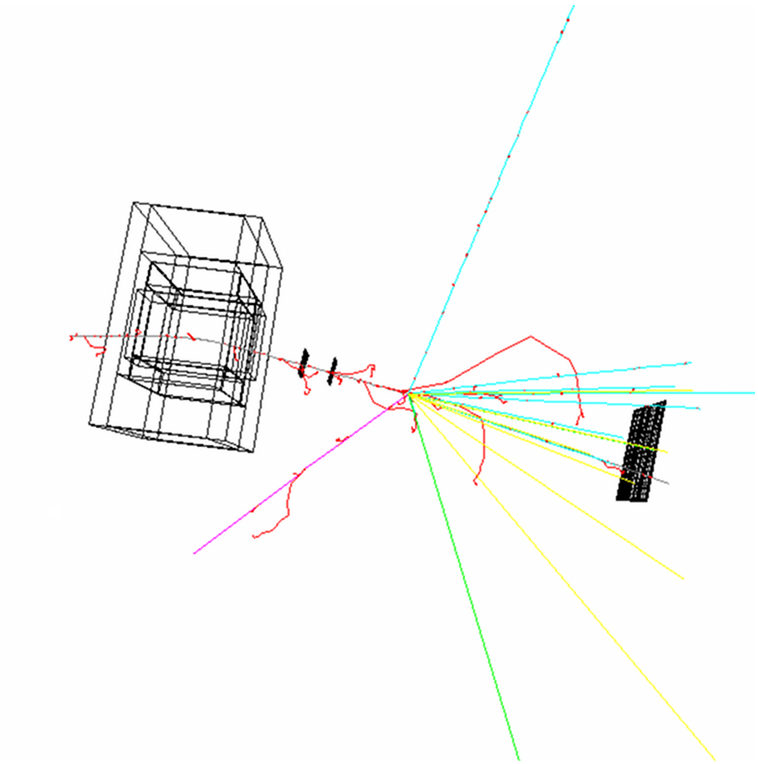

EventGenerators

Master Thesis in Physics and Astronomy

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Department of Fundamental Physics
Chalmers University of Technology
Gothenburg, Sweden 2015

EventGenerators

Master's Thesis

by

Stefan Buller

Supervisors:

Andreas Heinz

Examiners:

??

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Abstract

This thesis describes...

Sammandrag

Denna tes beskriver...

Acknowledgements

Thanks to Heinz!

Stefan Buller, Gothenburg, May 2015

Contents

1. Introduction

2. Theoretical Background

3. The Code

The code, based on CODEX [1], contains models for various quantities needed in the statistical model.

Glossary

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Bibliography

[1] U. Gollerthan. Untersuchungen zur Emission geladener Teilchen bei der kalten Fusion von $^{90}\mathrm{Zr} + {}^{89}\mathrm{Y}$. Master's thesis, Technische Hochschule Darmstadt, 1988.

A. Appendix 1

B. Code

```
struct spec_POS_t
{
  SPEC_FLOAT(_dx,              2.5,"cm","full width x of active volume")
      ;
  SPEC_FLOAT(_dy,              2.5,"cm","full width y of active volume")
      ;
  SPEC_FLOAT(_dz,           0.03,"cm","full width z of active volume");
  SPEC_FLOAT(_lgheight,      2,"cm","lightguide height over active
      volume");
  SPEC_FLOAT(_lgheadd,      0.70,"cm","size of square-shaped lightguide-
      heads");
  SPEC_MEDIA(_type,    "plastic",""   ,"POS active volume material.");
  SPEC_MEDIA(_lgtype, "plastic",""   ,"Lightguide material");
};
```

```
#include "auto_gen/spec_info_pos.hh"

#define UNUSED_PARAM(x)
```

This function is called when GGLAND creates the detector.

```
gg_geom_obj *make_POS(void *vspec,uint32_t UNUSED_PARAM(mask_set)
                      ,const transform_matrix *loc_rot
                      ,det_name_no_info *name_no)
{
```

C. Svenska här