

Documentation Planning Meeting 2018

1. Goals for this year
2. Feedback on new documentation
 - Search
 - Restructuring of higher-level web-pages
 - Colour scheme?!
3. Planned improvements for a delta-release with the drupal web pages
4. Out of date guides: FAQ, Introduction-to-G4
5. Physics lists:
 - Basic user guide
 - Physics list guide
 - Auto-generated documents
 - Differentiation between reference, generic, modular and physics list factories

Alexander Howard
(Documentation Co-ordinator)

Can we make the release?

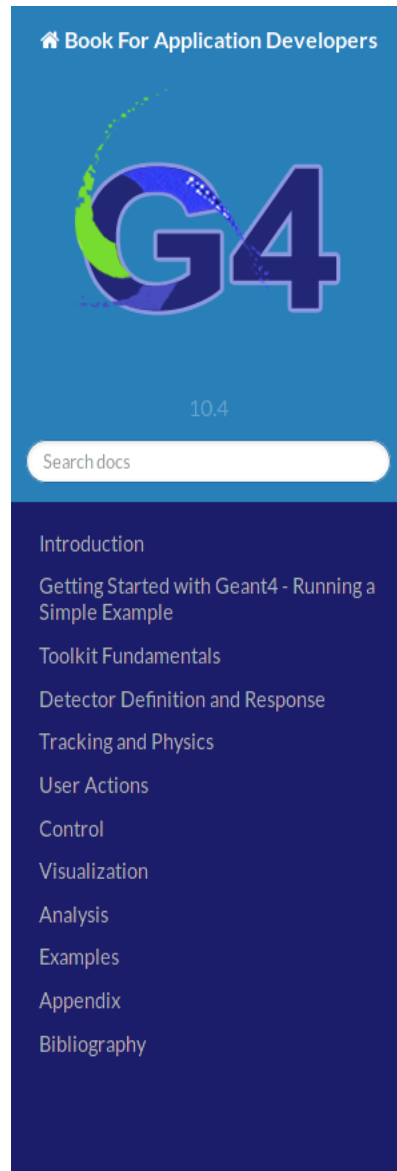
(I'm 95% confident)

WE DID! 
(give or take a few days...)

Colours...

- Which looks “best”?

Published



[Docs](#) » GEANT4 Book For Application Developers

GEANT4 Book For Application Developers

Scope of this manual

The User's Guide for Application Developers is the first manual the reader should consult when learning about GEANT4 or developing a GEANT4 -based detector simulation program. This manual is designed to:

- introduce the first-time user to the GEANT4 object-oriented detector simulation toolkit,
- provide a description of the available tools and how to use them, and
- supply the practical information required to develop and run simulation applications which may be used in real experiments.

This manual is intended to be an overview of the toolkit, rather than an exhaustive treatment of it. Related physics discussions are not included unless required for the description of a particular tool. Detailed discussions of the physics included in GEANT4 can be found in the [Physics Reference Manual](#). Details of the design and functionality of the GEANT4 classes can be found in the [User's Guide for Toolkit Developers](#).

GEANT4 is a completely new detector simulation toolkit written in the C++ language. The reader is assumed to have a basic knowledge of object-oriented programming using C++. No knowledge of earlier FORTRAN versions of Geant is required. Although GEANT4 is a fairly complicated software system, only a relatively small part of it needs to be understood in order to begin developing detector simulation applications.

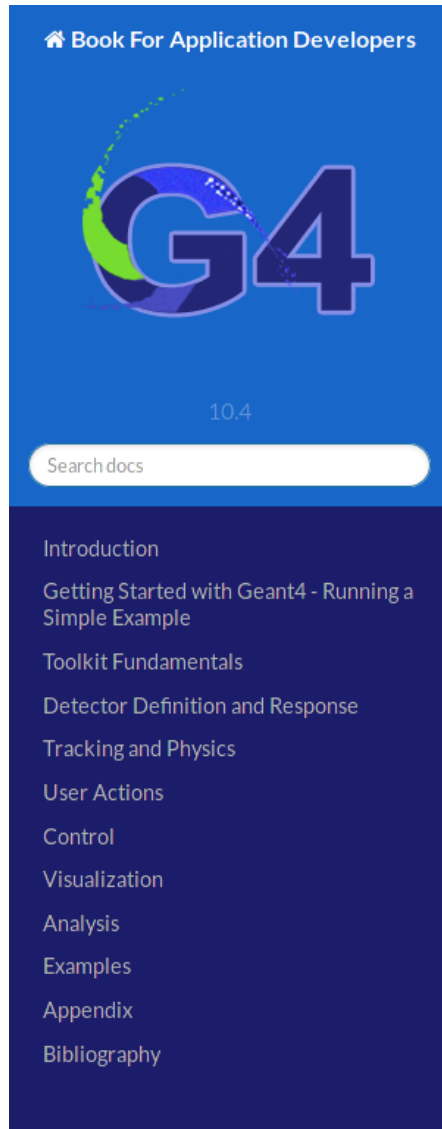
Status of this Document

Guide for Application Developers using the GEANT4 toolkit.

Colours...

- Which looks “best”?

Dark



Docs » GEANT4 Book For Application Developers

GEANT4 Book For Application Developers

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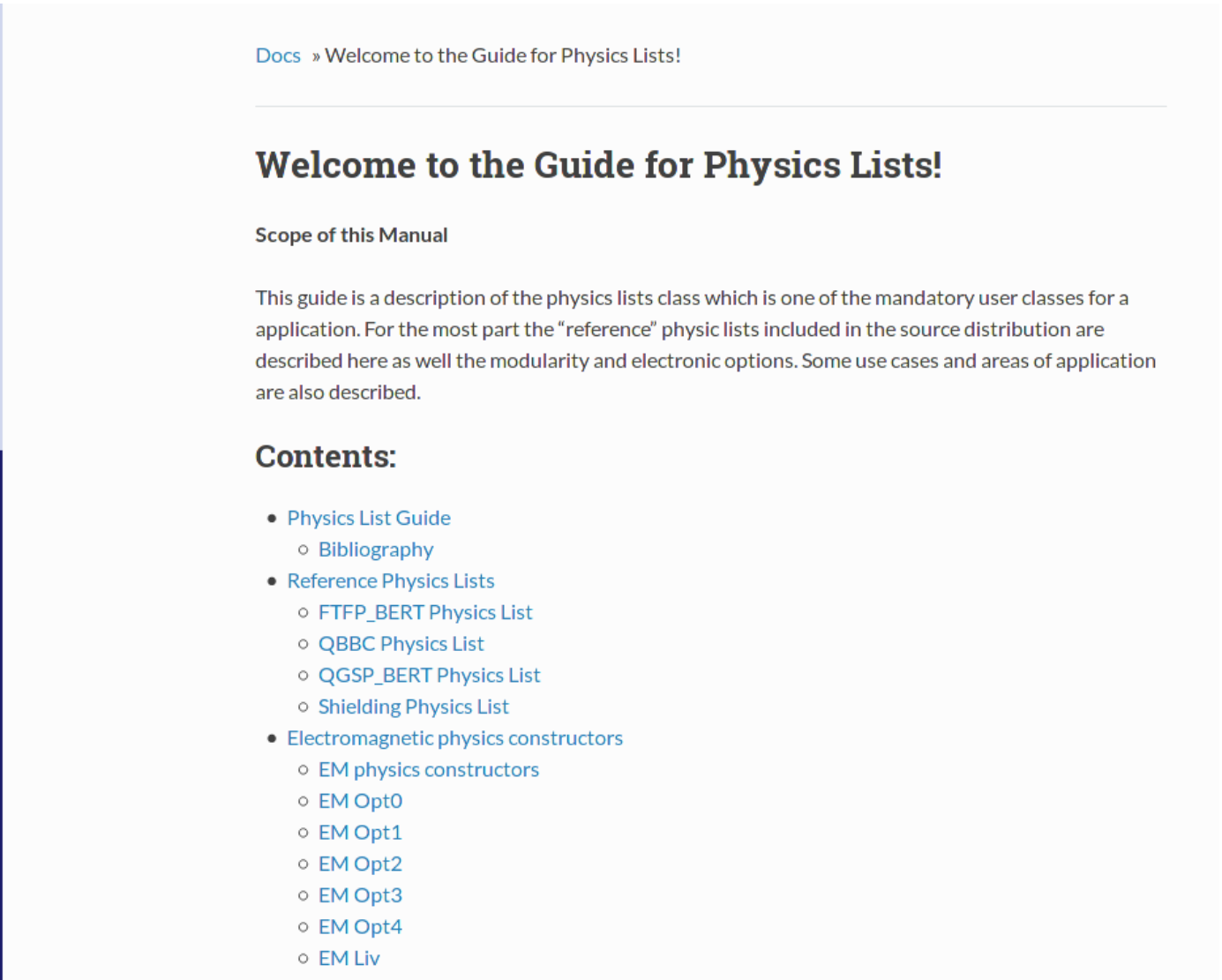
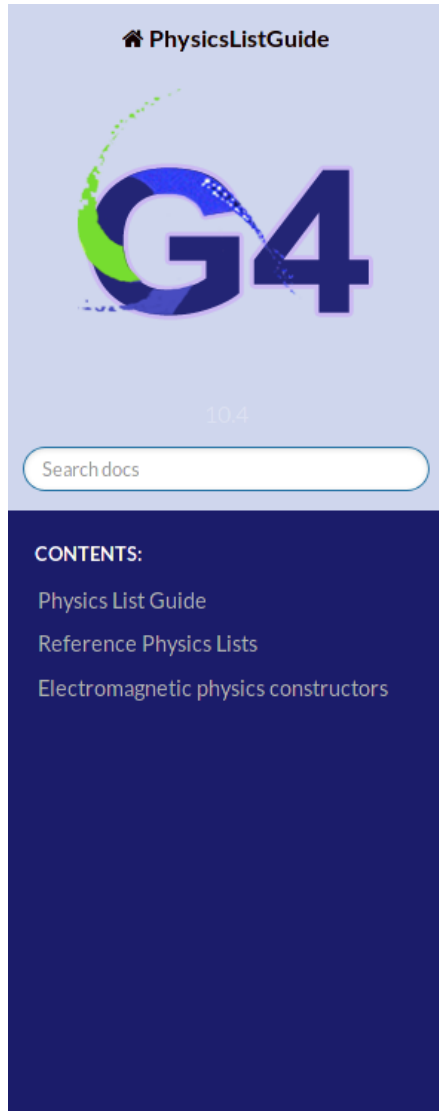
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Status of this Document

Colours...

- Which looks “best”?

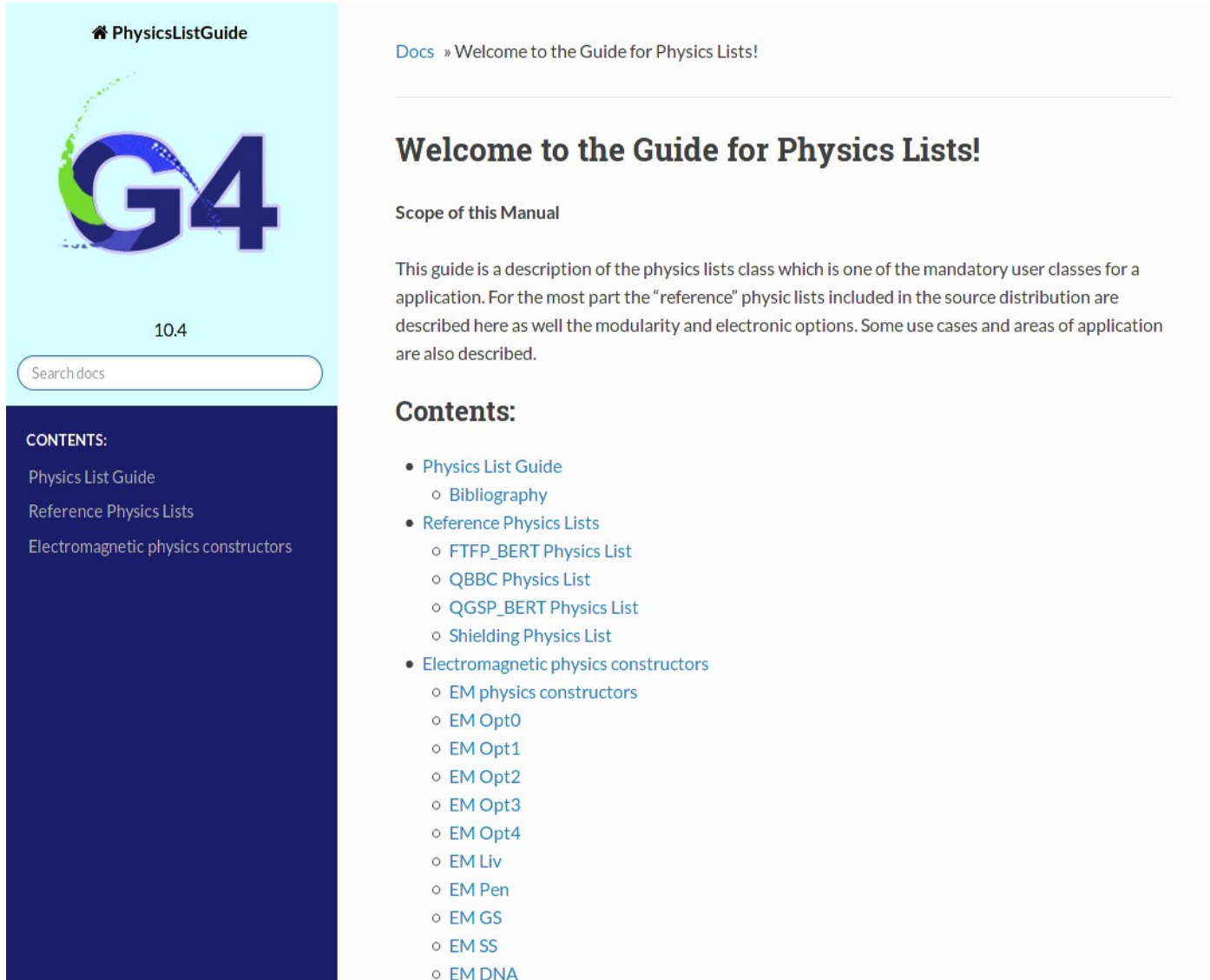
Medium



Colours...

- Which looks “best”?

Bright



The screenshot shows a web page for 'PhysicsListGuide'. The header is a bright cyan color with the text 'PhysicsListGuide' and a logo 'G4' in blue and green. Below the header is a search bar with the text 'Search docs'. The sidebar is a dark blue color with the text 'CONTENTS:' and a list of items: 'Physics List Guide', 'Reference Physics Lists', and 'Electromagnetic physics constructors'. The main content area is white with the text 'Docs » Welcome to the Guide for Physics Lists!' and a heading 'Welcome to the Guide for Physics Lists!'. Below this is a section 'Scope of this Manual' with a paragraph of text. At the bottom is a section 'Contents:' with a list of items: 'Physics List Guide', 'Reference Physics Lists', and 'Electromagnetic physics constructors'. The list items are: 'Bibliography', 'FTFP_BERT Physics List', 'QBBC Physics List', 'QGSP_BERT Physics List', 'Shielding Physics List', 'EM physics constructors', 'EM Opt0', 'EM Opt1', 'EM Opt2', 'EM Opt3', 'EM Opt4', 'EM Liv', 'EM Pen', 'EM GS', 'EM SS', and 'EM DNA'.

PhysicsListGuide

10.4

Search docs

CONTENTS:

- Physics List Guide
- Reference Physics Lists
- Electromagnetic physics constructors

Docs » Welcome to the Guide for Physics Lists!

Welcome to the Guide for Physics Lists!

Scope of this Manual

This guide is a description of the physics lists class which is one of the mandatory user classes for a application. For the most part the “reference” physic lists included in the source distribution are described here as well the modularity and electronic options. Some use cases and areas of application are also described.

Contents:

- Physics List Guide
 - Bibliography
- Reference Physics Lists
 - FTFP_BERT Physics List
 - QBBC Physics List
 - QGSP_BERT Physics List
 - Shielding Physics List
- Electromagnetic physics constructors
 - EM physics constructors
 - EM Opt0
 - EM Opt1
 - EM Opt2
 - EM Opt3
 - EM Opt4
 - EM Liv
 - EM Pen
 - EM GS
 - EM SS
 - EM DNA

Things missing

- Some commands: auto-generated – since 10.2?
- Some references – PRM
- Search at a “higher” level
 - is it possible for sphinx to “see” the other guides?
 - Limit search to only go down
- ...
- What else?

FAQ and Intro-G4

- Very out of date
- First access point for new users (?!)
- How to improve?

Intro to Geant4

- Needs general line-by-line inspection.
- 3. Overview of Geant4 Functionality
 - Include Analysis category.

FAQ – comments from John

- FAQs
 - Check the Useful Tips page at SLAC
- Installation
 - Out of date. The Installation Guide is now very good (thanks to Ben) and I think we can refer users to that and the User Forum.
- Run time problems:
 - Run time problems are so numerous and varied it's impossible to cover. Seems odd to pick out just three. Suggest referring to the User Forum.
 - Perhaps just one FAQ: New users often seem to miss the fact that they need to specify options to get graphics windows. Point this out and refer them again to the Installation Guide.
 - 3) Refers to DEC computers. No longer relevant.

FAQ - continued

- Geometry
 - 1-4) Great. Keep.
- Tracks and steps
 - 1) Great. Keep
 - 2) Also great but mentions “novice” examples.
- Physics and cuts
 - 1) Great. Keep.
- Vis
 - 1) Completely out of date. Remove. Or refer to Installation Guide.
 - 2) OK.
 - Suggest referring user to vis thread of User Forum.

Physics Lists

- Missing a novice/basic users guide explaining
 - why we have physics lists?
 - what the (technical) variations are?
 - what's suitable? (use-case reference physics lists)
- Physics list guide – first release, but probably needs more work
- Auto-generated documents
- Differentiation between reference, generic, modular and physics list factories
 - Robert has already agreed to do a 1 page description
- Co-ordination between
 - physics list and validation and examples Working Groups

Work Plan 2018

- After the efforts of last year we should profit from the convenience and ease of documentation maintenance
- Please encourage contributions from working groups
- Main areas for me: PLG and PRM
- Anything specific outside of “maintain category descriptions”?
- Videos?