

# Documentation Overview

1. Progress since last year (!)
2. Feedback on new documentation
  - Search
  - Restructuring of higher-level web-pages
  - Colour scheme?!
  - Alternative Formats
3. General review of all documents?
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 Out of date guides: FAQ, Introduction-to-G4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

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(Documentation Co-ordinator)

# Some progress since last year...

- All documents were successfully migrated to ReST/Sphinx
- git repository used throughout
- During the migration a number of revisions (improvements) were made
- Still room to take things further
- Hopefully new simpler markup approach will encourage and facilitate contributions from all developers
- Should we think about the whole documentation structure?
  - What do users really need?
  - Why so many guides?
  - Do people still read pdf?
  - What about epub or mobi?
- Feedback has been very positive, I would welcome any more (negative included)

My slide from doc-meeting Nov+Feb...

**Can we make the release?**

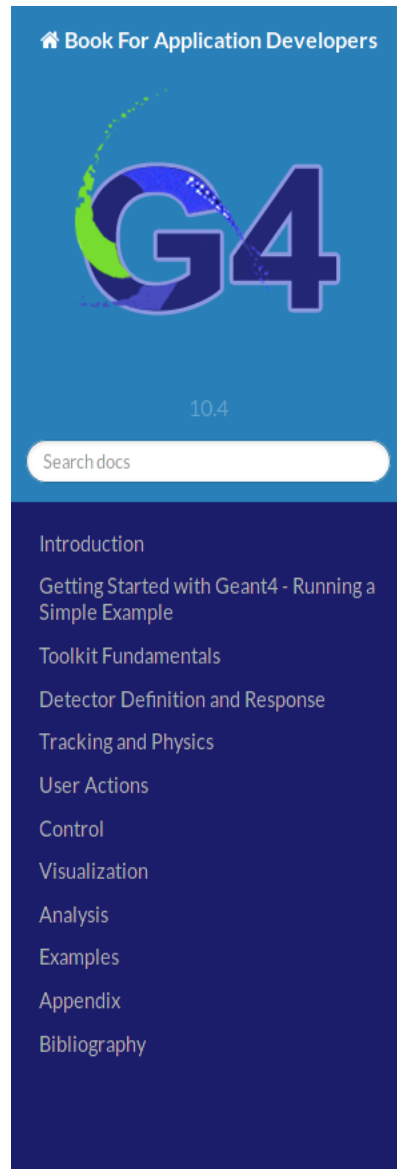
**(I'm 95% confident)**

**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.

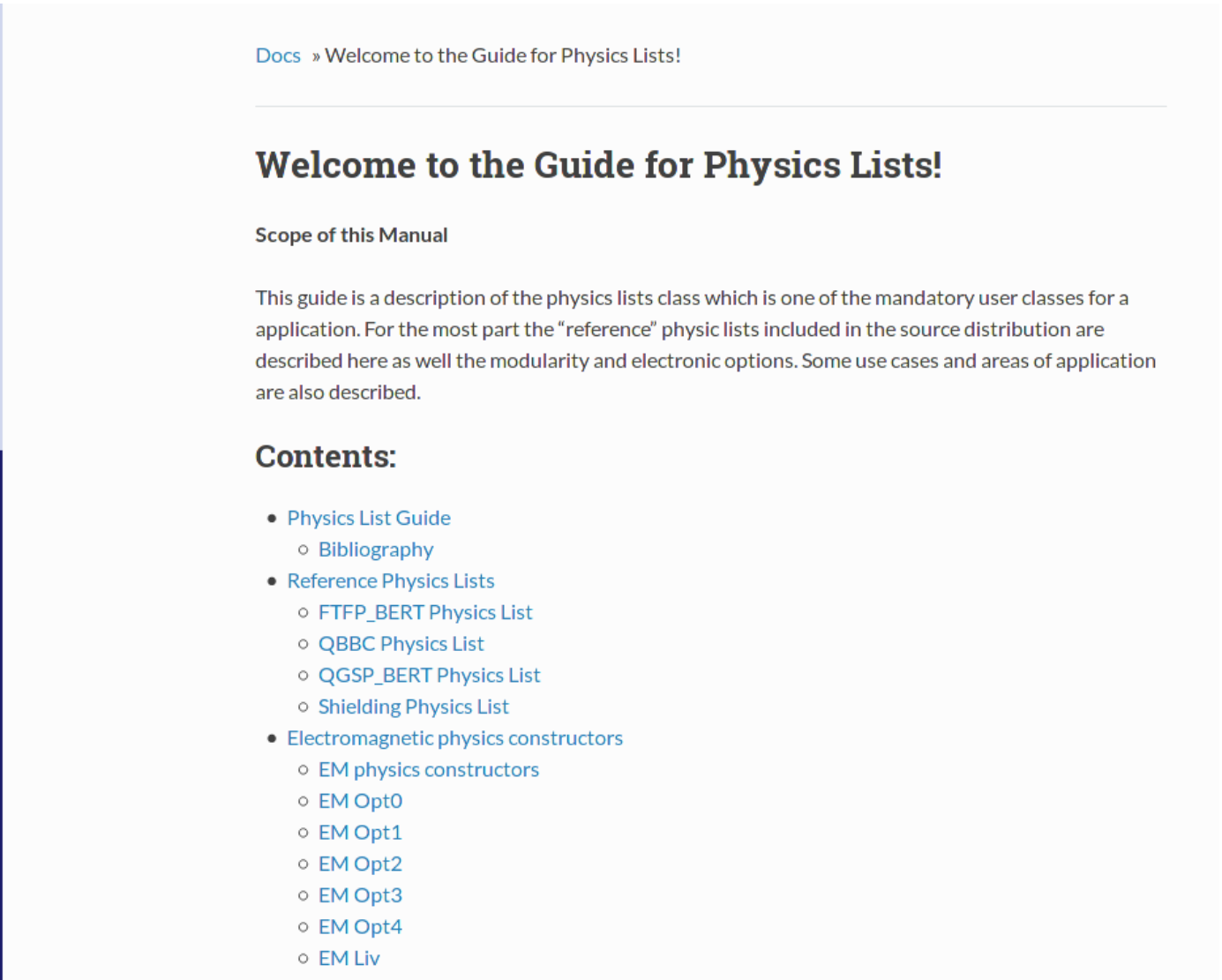
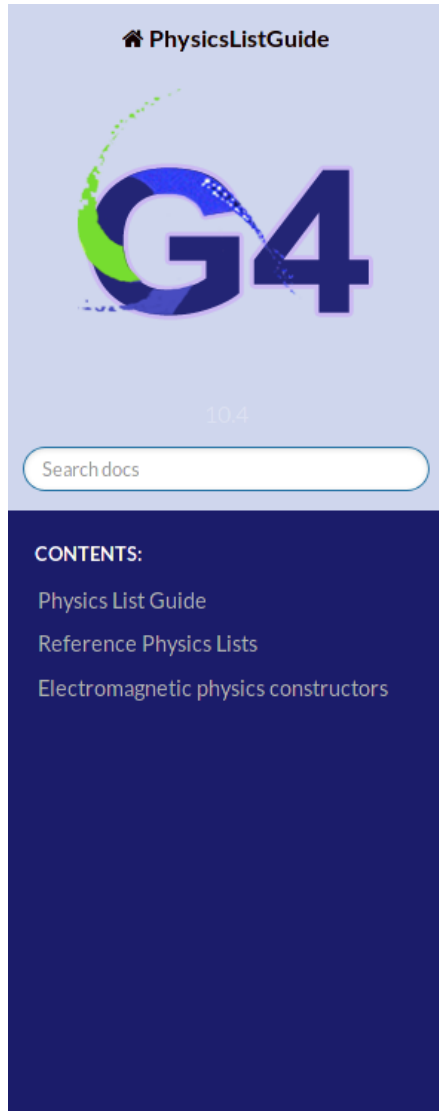
### Status of this Document

Guide for Application Developers using the GEANT4 toolkit.

# Colours...

- Which looks “best”?

Medium



# Out of Date Guides

- FAQ and Intro-G4
  - Very out of date
  - First access point for new users (?!)
  - How to improve?
- Some other areas of guides need revision
  - PRM particularly is a chronological historical record of our models
- Physics list guide is a new (and very welcome) contribution, but with limited content at the moment
  - Volunteers to expand, explain, revise, justify?

# 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
  - At least a 1 page description will be included soon
- Co-ordination between
  - physics list and validation and examples Working Groups
  - Could this be a goal for this workshop?

# Any Suggestions?


- A lot of this work was done by a few people
- Don't think that you can't contribute!
- The sphinx framework is very adapt to making changes to formatting, colour schemes, content
- Please do contact me if you have any suggestions, opinions or want to contribute!!!




# Delta Releases?

- I previously wanted to have incremental (delta) releases of the documentation whenever there were significant updates
- So far this hasn't happened – the updates were relatively minimal
- There was also some confusion over documentation for new developments (current reference tags, beta release) and updates on previous release
- Should we host “dev” documentation from the working group web-page and have only the relevant docs for each release on the download page?
- What about the beta release?
- What about advanced users being given access to reference tags developments?

# The Future

- After the substantial efforts of last year we should profit from the convenience and ease of documentation maintenance
- Please encourage contributions from all working groups and developers
- Main areas for me: PLG and PRM
- Anything specific outside of “maintain category descriptions”?
- Videos? 
  - Parallel working session, please contribute/attend

# The Future

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- **Summary: since the 2016 CM things have been revolutionised so we should all be congratulated!**