

GAMBIT Documentation

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GAMBIT

Tutorials

This is a place where we will place tutorials. In order to place something here, please take the tutorial tutorial (under construction).

MC4BSM, April 2018

Tutorial given by Andy Buckley at the MC4BSM 2018 workshop, April 2018. [Link to materials](#). Uses Docker image from `docker pull gambitbsm/gambit-tutorial`

Dartmouth-TRIUMF HEP/Cosmo tools bootcamp

Tutorial given by Anders Kvellestad and Jonathan Cornell at the Dartmouth-TRIUMF HEP/Cosmo tools bootcamp 26.10.17.

Files:

- Slides part 1
- Slides part 2
- Installation_before_tutorial.txt
- tutorial_commands.txt
- WC_lite.yaml
- WC_lite.pip

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GAMBIT

- ▶ ScannerBit
- ▶ Deprecated List
- ▶ Namespaces
- ▶ Classes
- ▶ Files
- ▶ Examples

GAMBIT v1.5.0-2191-ga4742ac

a Global And Modular Bsm Inference Tool

Main Page | Related Pages | Namespaces ▾ | Classes ▾ | Files ▾ | Examples

gambit is hosted by Hepforge, IPPP Durham

GAMBIT Documentation

GAMBIT is a global fitting code for general definition of new models, observables, ...

The Bits of Gambit:

- ScannerBit
- ColliderBit
- DarkBit
- SpecBit
- PrecisionBit
- FlavorBit
- DecayBit
- CosmoBit
- NeutrinoBit

Gambit Tools:

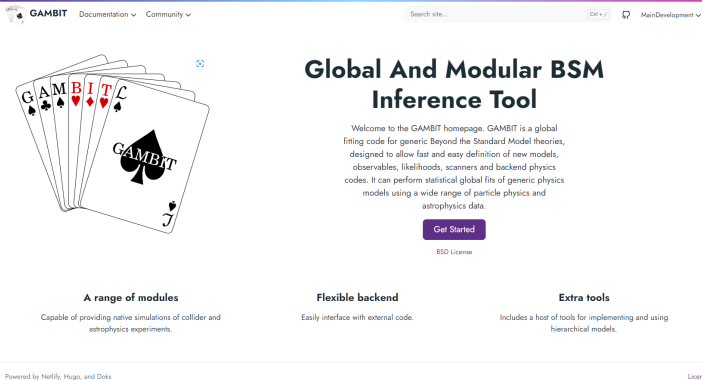
- pippi
- GUM
- Models

collider_event_we
COLLIDER_FINAL
collider_harvester
collider_harvester
COLLIDER_INIT_G
COLLIDER_INIT_C
collider_names G
COLLIDERBIT_DE
ColliderBit_dumm
ColliderBit_eventi

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- Build a new, **modern website** to replace one hosted on Hepforge
- Produce improved, easily maintainable **auto-generated documentation** via Doxygen/Sphinx
- Write practical **onboarding guides** for new users
- Ensure that new system is **easy to maintain and expand**

- Hosted on **GitHub Pages** using **Hugo** and the **Doks** theme
- All pages rendered from **markdown files**



The screenshot shows the homepage of the GAMBIT project. At the top, there is a navigation bar with the GAMBIT logo, links for 'Documentation' and 'Community', a search bar, and a 'MainDevelopment' dropdown. The main content area features a large image of playing cards spelling out 'GAMBIT' and a 'J' on the Jack of Spades. The title 'Global And Modular BSM Inference Tool' is prominently displayed. Below the title is a welcome message and a 'Get Started' button. Three columns of text describe the project's features: 'A range of modules', 'Flexible backend', and 'Extra tools'. The footer includes 'Powered by Netlify, Hugo, and Doks' and a 'License' link.

GAMBIT Documentation ▾ Community ▾ Search site... Ctrl + F MainDevelopment ▾



Global And Modular BSM Inference Tool

Welcome to the GAMBIT homepage. GAMBIT is a global fitting code for generic Beyond the Standard Model theories, designed to allow fast and easy definition of new models, observables, likelihoods, scanners and backend physics codes. It can perform statistical global fits of generic physics models using a wide range of particle physics and astrophysics data.

[Get Started](#)

BSD License

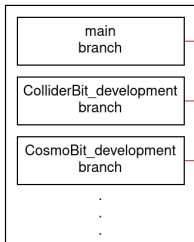
A range of modules
Capable of providing native simulations of collider and astrophysics experiments.

Flexible backend
Easily interface with external code.

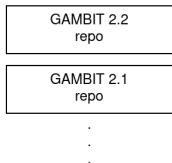
Extra tools
Includes a host of tools for implementing and using hierarchical models.

Powered by Netlify, Hugo, and Doks License

GAMBIT development repo



GAMBIT release repos

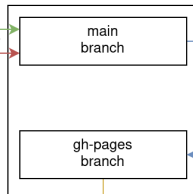


User pushes
guides/tutorials to website
repo (site can also be
tested locally)

.md files

GitHub workflow
generates documentation
and pushes to website
repo

GAMBIT website repo



GitHub workflow builds
site and pushes to
deployment branch

.html etc

Automatic GitHub
workflow deploys site to
GitHub pages

Site appears
somewhere on the
internet!

My Project

Main Page **Classes** Files

Class List Class Index Class Members

Foo Foo

Foo::Foo Class Reference

Public Types | List of all members

Public Types

enum Foo
Foo enum, possible ways to foo.

The documentation for this class was generated from the following file:

- Foo.h

Generated on Thu Dec 6 2012 15:38:12 for My Project by [doxygen](#) 1.8.2

SphinxDemo

Search docs

CONTENTS

Python Documentation

USER DOCUMENTATION:

User Documentation

» Welcome to SphinxDemo's documentation! [View page source](#)

Welcome to SphinxDemo's documentation!

Contents:

- Python Documentation
 - test module

User Documentation:

- User Documentation

Indices and tables

- Index
- Module Index
- Search Page

Next

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Built with Sphinx using a theme provided by Read the Docs.

Doxygen: only requires Doxygen

Sphinx: requires Doxygen, Sphinx,
Breathe, Exhale

Solution: Doxygen with Doxybook2 to produce flexible markdown files

- Installation
- Basic examples (maybe for example ColliderBit and a few others)
- More advanced tutorials (for example HPC, postprocessing, extending GAMBIT code)
- Individual module reference pages

- GitHub repo
- Website

- Feedback!
- Code documentation conventions (docstrings, masking etc)
- Mechanics of website editing/maintaining
- Website manager / documentation enforcer
- All comments welcome!