

# Online Particle Physics Information Review: status and proposals

Micha Moskovic, 2020 PDG mini collaboration  
meeting, 5 nov 2020

# Who I am & what this is about

- Previously: hep-th researcher
- Since 2016: part of team running [INSPIRE](#), at CERN
- Since 2017: (co-)author of PDG review on “[Online Particle Physics Information](#)”
- Sarah Demers new co-author
  
- Issues with current format of review + some proposals
- Presentation prompted in part by referee comments on relevance of review

## Online Particle Physics Information

1	Introduction	1
2	Particle Data Group (PDG) resources	2
3	Particle Physics Information Platforms	2
4	Literature Databases	3
5	Particle Physics Journals and Conference Proceedings Series	4
6	Conference Databases	4
7	Research Institutions	4
8	People	4
9	Experiments	5
10	Jobs	5
11	Software Packages and Repositories	6
11.1	Particle Physics Software	6
11.2	Astrophysics Software	7
11.3	Web Apps	8
11.4	Mobile Apps	8
12	Data repositories	8
12.1	Particle Physics	8
12.2	Astrophysics	9
12.3	General Physics	10
13	Data preservation activities	10
13.1	Particle Physics	10
13.2	Astrophysics	11
14	Particle Physics Education and Outreach Sites	11
14.1	Science Educators' Networks	11
14.2	Physics Courses	12
14.3	Masterclasses	12
14.4	General Sites	13
14.5	General Physics Activities	13
14.6	Particle Physics Activities	13
14.7	Lab Education Offices	15
14.8	Educational Programs of Experiments	17
14.9	News	18
14.10	Art in Physics	19
14.11	Blogs and Twitter	19

Revised August 2019 by M. Moskvic (CERN).

### 1 Introduction

The collection of online information resources in particle physics and related areas presented in this chapter is of necessity incomplete. An expanded and regularly updated online version can be found at:

[http://library.cern/particle\\_physics\\_information](http://library.cern/particle_physics_information)

Suggestions for additions and updates are very welcome.<sup>1</sup>

<sup>1</sup>Please send comments and corrections to [micha.moshe.moskvic@cern.ch](mailto:micha.moshe.moskvic@cern.ch)

# History & content

- Curated list of online resources related to particle physics and globally relevant (not specific to single institution)
- First appeared in [2000 Edition of RPP](#) when the web was a much smaller place
- Maintained similar structure and presentation: short description + link
- Very broad scope, unlike most other reviews. Examples:
  - [arXiv.org](#) eprint server
  - [Geant4](#) detector simulation software
  - [Phantom of the Universe](#) planetarium show
  - [IceCube Masterclass](#)
- Difficult for a couple of people to be aware of everything and keep it updated
- Need to actively reach out, we receive no spontaneous suggestions

# Medium & constraints

- Exists both as [printed review](#) and [online webpage](#)
- Print is abridged due to constraint on number of pages
- Maintaining both versions in sync is currently a manual and labor-intensive process
- Is it still useful to print all these links?

# Visibility

- Most people seem unaware of review
- “Lost” in front-matter
- Online version:  
~120 unique visitors/month
- Comparison: INSPIRE ~80k unique visitors/month

The screenshot shows the PDG (Particle Data Group) website. At the top, there is a navigation bar with links for HOME, pdgLive, Summary Tables, Reviews, Tables, Plots, and Particle Listings. The main heading is "2020 Review of Particle Physics". Below this, there is a citation: "Please use this CITATION: P.A. Zyla et al. (Particle Data Group), Prog. Theor. Exp. Phys. 2020, 083C01 (2020)." and a note that downloadable figures (2018) are available. A search box labeled "Search Reviews" is present. Under the "Categories:" section, there is a "Close/Open categories" button. The categories listed are: Introduction, History plots, Online information, Authors, Online particle physics information (rev.), Constants, Units, Atomic and Nuclear Properties, Physical constants (rev.), and Astrophysical constants (rev.). The "Online particle physics information (rev.)" category is highlighted with an orange border, and it has sub-links for "PDF / Interactive".

PDG  
particle data group

## Reviews, Tables, & Plots

HOME: pdgLive Summary Tables Reviews, Tables, Plots Particle Listings

### 2020 Review of Particle Physics

Please use this **CITATION**:  
P.A. Zyla et al. (Particle Data Group), Prog. Theor. Exp. Phys. **2020**, 083C01 (2020).

Downloadable figures (2018) are available for these reviews.

### Reviews, Tables & Plots

Search Reviews

Categories: Close/Open categories

- Introduction, History plots, Online information
  - Introduction
  - History plots
  - Authors
  - Online particle physics information (rev.) PDF / Interactive
- Constants, Units, Atomic and Nuclear Properties
  - Physical constants (rev.)
  - Astrophysical constants (rev.)

# Suggested improvements

- Make it online-only to ease editing
- Make it more collaborative
- Needs:
  - better visibility
  - better platform to lower barrier for edits
- Tentative: [Github repository](#)
- Similar conceptually to [awesome lists](#) (see also [iris-hep/awesome-hep](#) with HEP software)
- Maybe wiki-like platform?

The screenshot shows a GitHub repository page for 'michamos / RPP-online-hep-info'. The repository has 1 pull request, 0 stars, and 1 fork. The current file is 'content.md' in the 'master' branch, which is 641 lines (418 sloc) and 55.1 KB in size. A commit by 'michamos' titled 'Fix typos' is shown, with the latest commit being 'd425e80' from 1 hour ago. The file content includes an 'Introduction' section and a 'Particle Data Group (PDG) resources' section. The 'Introduction' section mentions that the collection of online information resources in particle physics and related areas presented in this chapter is of necessity incomplete. An expanded and regularly updated online version can be found at: [http://library.cern/particle\\_physics\\_information](http://library.cern/particle_physics_information). Suggestions for additions and updates are very welcome.<sup>[^1]</sup> The footnote <sup>[^1]</sup> states: Please send comments and corrections to [micha.moshe.moskovic@cern.ch](mailto:micha.moshe.moskovic@cern.ch). The 'Particle Data Group (PDG) resources' section includes a bullet point for 'Review of Particle Physics (RPP)'. The edit icon in the file header is highlighted with an orange box.

Search or jump to... Pulls Issues Marketplace Explore

michamos / RPP-online-hep-info Unwatch 1 Star 0 Fork 1

<> Code Issues 1 Pull requests Actions Projects Wiki ...

master RPP-online-hep-info / content.md Go to file ...

michamos Fix typos x Latest commit d425e80 1 hour ago History

2 contributors

641 lines (418 sloc) 55.1 KB Raw Blame Edit

## Introduction

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## Particle Data Group (PDG) resources

- **Review of Particle Physics (RPP)**: A comprehensive report on the fields of particle physics and related areas of cosmology and astrophysics, including both review articles

# Conclusion & open questions

- Same form as 20 years ago
- Probably time for some changes
  
- Should it remain a review?
- How to deal with the print constraints efficiently?
- How to increase visibility?
- How to attract more contributions and maintain it up-to-date?

If you have ideas, suggestions, want to contribute, let us know!

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