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 <u>INSPIRE</u>, 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

Online Particle Physics Information

1	Intr	oduction
2	Par	ticle Data Group (PDG) resources
3	Par	ticle Physics Information Platforms
4	Lite	rature Databases
5	Par	ticle Physics Journals and Conference Proceedings Series
6	Con	ference Databases
7	Rese	earch Institutions
8	Peo	ple
9	Exp	periments
10	Jobs	8
11	Soft	ware Packages and Repositories
	11.1	Particle Physics Software
	11.2	Astrophysics Software
	11.3	Web Apps
	11.4	Mobile Apps
12	Dat	a repositories
	12.1	Particle Physics
	12.2	Astrophysics
	12.3	General Physics
13	Dat	a preservation activities
	13.1	Particle Physics
	13.2	Astrophysics
14	Par	ticle Physics Education and Outreach Sites
	14.1	Science Educators' Networks
	14.2	Physics Courses
	14.3	Masterclasses
	14.4	General Sites
	14.5	General Physics Activities
	14.6	Particle Physics Activities
	14.7	Lab Education Offices
	14.8	Educational Programs of Experiments
	14.9	News
	14.10	Art in Physics
	14.11	Blogs and Twitter

Revised August 2019 by M. Moskovic (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

Suggestions for additions and updates are very welcome. 1

¹Please send comments and corrections to micha, moshe, moskovic@cern.ch

History & content

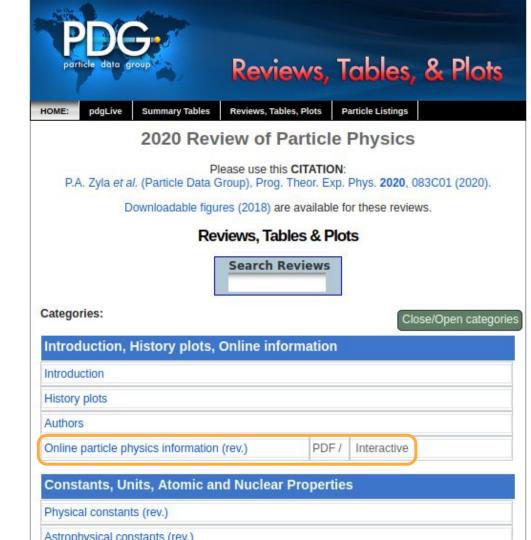
- Curated list of online resources related to particle physics and globally relevant (not specific to single institution)
- First appeared in <u>2000 Edition of RPP</u> when the web was a much smaller place
- Maintained similar structure and presentation: short description + link
- Very broad scope, unlike most other reviews. Examples:
 - o <u>arXiv.orq</u> eprint server
 - Geant4 detector simulation software
 - <u>Phantom of the Universe</u> planetarium show
 - o <u>IceCube Masterclass</u>
- 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 <u>printed review</u> and <u>online webpage</u>
- 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?

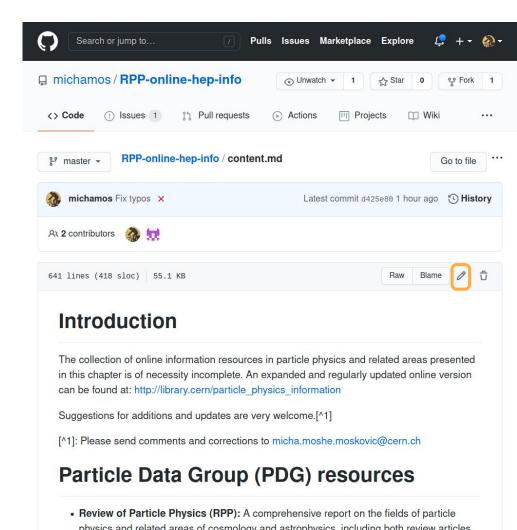
Visibility

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



Suggested improvements

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



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! micha.moshe.moskovic@cern.ch, sarah.demers@yale.edu