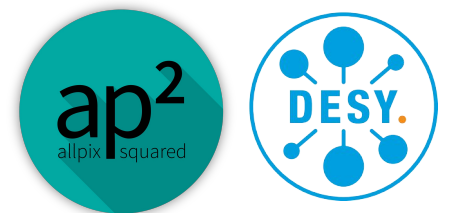# Allpix Squared Website & Documentation

Overview and updates since last year

Stephan Lachnit
4th Allpix Squared User Workshop

HELMHOLTZ

Motivation

Using Markdown everywhere

- About 1.5 years ago, it was decided the website needs a makeover

- Documentation was in LaTeX, which did not render nicely to HTML

- Markdown was chosen as a format

- Ended up using hugo, a fast static website generator that natively uses Markdown

  - Hugo requires a theme, we chose Docsy

- More details in the talk from last year's workshop

- New website finally launched with release of version 3.0.0

  on allpix-squared.docs.cern.ch

New Website

Things you can do now

- Ponder over equations that now render correctly on the website

- Enjoy an online documentation that never has been prettier before

- Read about the latest Allpix Squared news or check the documentation on your phone

- Copy nicely highlighted code blocks with a single button

- Use the site-wide search function

- Quickly navigate chapter, sections and subsection with navigation bars on the left and right side

- Read the documentation directly in GitLab/GitHub

- Continue using the PDF documentation

Allpix Squared website commercial

New Features

Updates since last year

- Automatic deployment via GitLab Pages

- Updated design for front-page, news section and other sub-pages

- Improved display width on wide screens and mobile phones

- Artifacts from converting from Markdown to PDF fixed

- Directly copy code blocks on the website

- Doxygen API reference available on the same website

- Improved some sections of the manual and added documentation of objects

- RSS for news

Live Demo

Test your documentation changes in real time

The real website: allpix-squared.docs.cern.ch

However, let's build it from scratch:

```
# install hugo, here e.g. Ubuntu

sudo apt install hugo

# clone website

git clone https://gitlab.cern.ch/allpix-squared/allpix-squared-website.git

cd allpix-squared-website

# fetch artifacts from allpix-squared repository and run hugo

./get_artifacts.sh job <ci_job_nummer>

hugo server
```
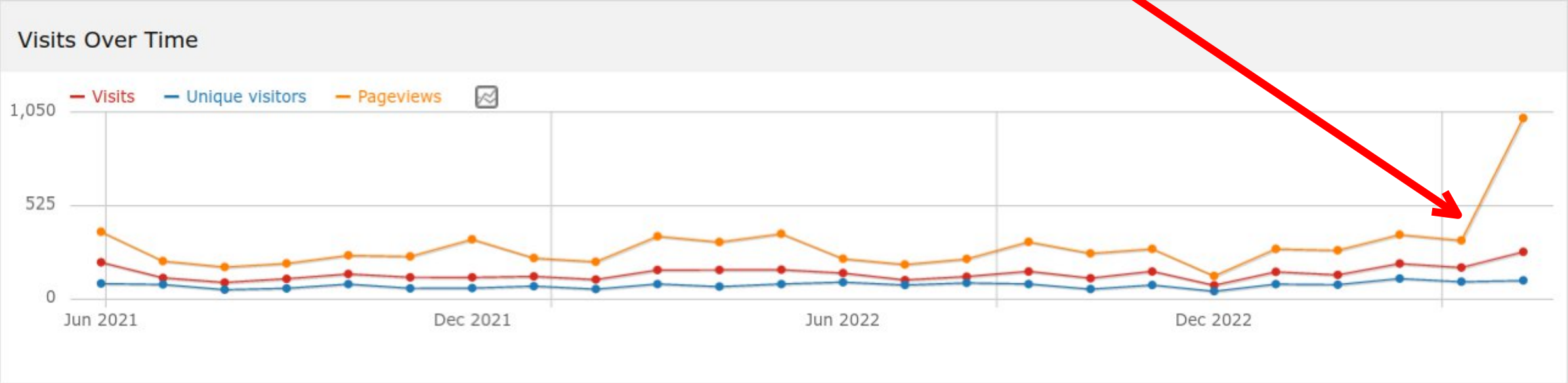
Live Demo

Testing Testing Testing

... and contributing

- Testing how a website / PDF ends up looking is quite difficult to do via CI

- But as you can see, testing your own documentation changes is easy!

- Documentation on how to write a module documentation:

  `doc/README.md on gitlab.cern.ch/allpix-squared/allpix-squared`

- PDF also produced by CI, just download the artifact from the `docs:usermanual-pdf` CI job

Page Visits

Looks like users already started using it

New website launched

Upcoming Features

Module maintainers, status, input and output objects

Upcoming Features

Different versions also on the website

- Documentation of old Allpix Squared versions down to v0.2 available as PDF

  on project-allpix-squared.web.cern.ch/usermanual

- Documentation of master branch also available as PDF there

- Website currently only features documentation of latest stable version

- Would be nice to have online documentation for older versions (starting from v3.0) as well

- In principle supported by Docsy, but not trivial

  - Reason: permanent storage required (not really possible with GitLab pages)

Lessons Learned

Building a good-looking website with documentation is harder than it sounds

- Whatever you do, you probably want Markdown

  - Easy to read without rendering, and JIT rendering native on GitLab/GitHub

  - Code highlighting is excellent almost everywhere

  - Things like LaTeX formulae, Mermaid or PlantUML diagrams are widely supported

- Choose the tool best suited for your use-case

  - Mostly API reference? <u>Doxygen</u> with a pretty theme will do the job

  - Solid documentation but no fully featured website? <u>Sphinx</u> can be quite good for that

  - Full featured website with news section? Hugo is relatively simple and very flexible

    - You will most likely have to touch HTML and CSS though...

Thank you

Contact

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