SciPost

and the reform of scientific publishing

ICTP Webinar, 17 May 2022

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Plan of the talk

- SciPost

- Best practices

- Infrastructure

- Difficulties

- Lessons for the future of Diamond OA

Sci|Post

What is it?   A complete publishing portal
                                (from preprint to metadata curation)

Who runs it?   Professional scientists
                                (is and will remain grassroots)

What does it offer?
- Journals
- Commenting
- Metadata services

Summary?
- Openness
- Quality

What does it aim to achieve?

A complete reform of publishing at all levels

- Implement Genuine Open Access

  two-way: free for readers, free for authors

- Implement a healthier business model
  - *strict editorial/financial decoupling*
  - *no profit-making on the back of scientists*
  - *consortial model; not based on APCs*

- Modernize the refereeing procedure
  - *open; more credit to referees*
  - *streamline post-publication feedback*

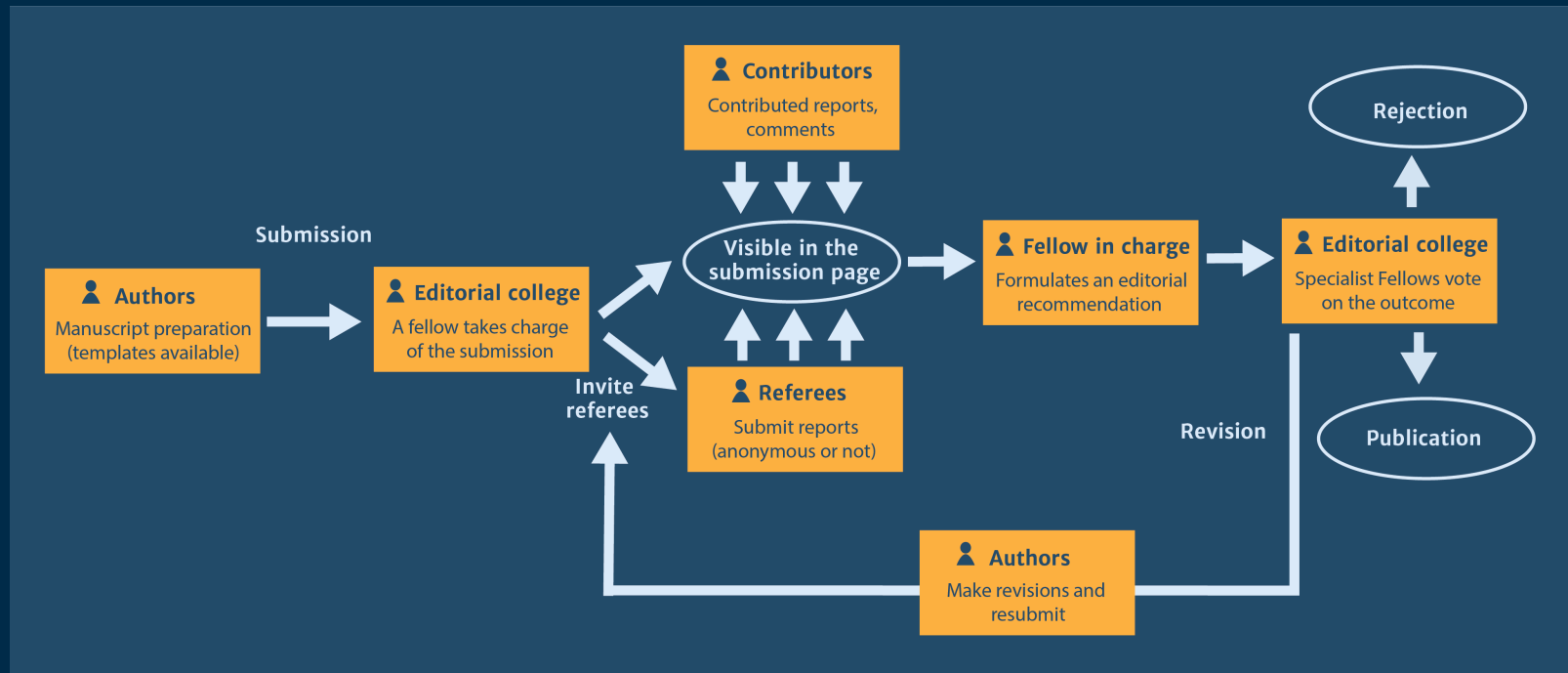- Reform impact assessment

Sci|Post

Journals

>1200 publications as of now

- SciPost Physics

- SciPost Physics Core

- SP Lecture Notes

- SP Proceedings

- SP Codebases

Best practice examples

- Peer-witnessed refereeing
- Cost-slashing consortial business model
- Community-driven
- Open infrastructure

Editorial workflow

SciPost's business model

Diamond

(though I prefer metals)

- no APCs, no subscriptions   *[Platinum]*
- fully not-for-profit operations   *[Palladium]*
- costs: about €600 per publication
  A fraction of the current norm!
- consortial model: donations
  (inspirations: arXiv, ...)

SciPost

Community-driven
Latest Virtual General Meeting (2022)

SciPost

Quick search 🔍

🏠 Journals ▾ Submissions ▾ More ▾ About SciPost ▾   Logged in as Prof. Jean-Sébastien Caux ▾ 🔳

Forums / Meeting Details

Meeting is finished [2022-01-31 to 2022-02-06]

VGM EdCol 2022-01   138 posts

Admin actions:
- Update this Meeting
- Delete this Meeting (and all Posts and Motions it contains)

Permissions on this Meeting instance   View/manage

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Quick links: all posts and motions (click to toggle)

Quick links: anchor posts, latest followup (click to toggle)

SciPost

SciPost's infrastructure

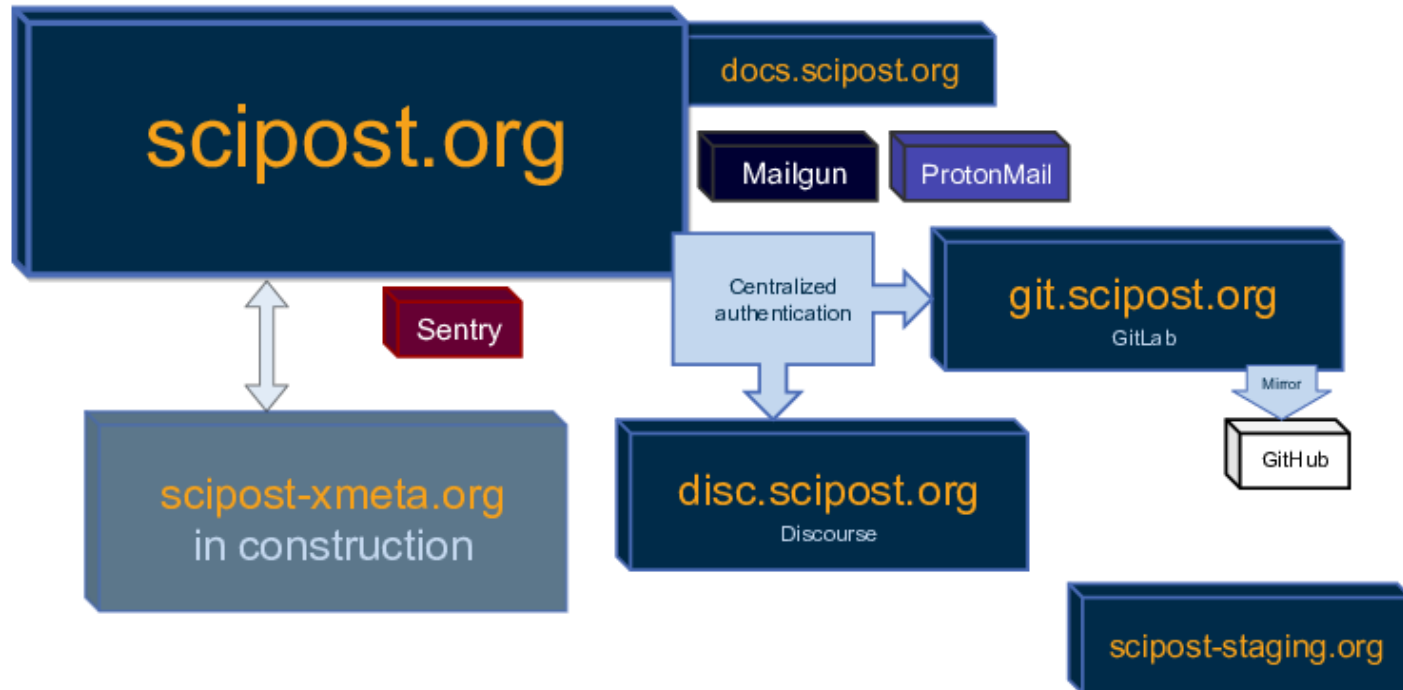## Based exclusively on Free Software

Tech stack:

All our systems are built from scratch.

We leverage and contribute to FOSS.

- Django *[Python web framework]*
- Postgresql *[database engine]*
- ~~Vue.js~~ HTMX *[frontend tech]*
- Bootstrap *[frontend styling]*
- MathJax *[LaTeX javascript engine]*
- GitLab *[hub @ git.scipost.org]*
- ... lots more, see git.scipost.org

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SciPost Services Architecture

(July 2021)

scipost.org

docs.scipost.org

Mailgun   ProtonMail

Sentry

Centralized authentication

git.scipost.org
GitLab

Mirror

GitHub

scipost-xmeta.org
in construction

disc.scipost.org
Discourse

scipost-staging.org

Browsable API

Publication Public Api List

Publication Public Api List

`Filters` `OPTIONS` `GET ▾`

`«` `1` `2` `3` `…` `46` `»`

GET /api/publications/

```
HTTP 200 OK
    Allow: GET, HEAD, OPTIONS
    Content-Type: application/json
    Vary: Accept

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  "count": 1141,
  "next": "https://scipost.org/api/publications/?limit=25&offset=25",
  "previous": null,
  "results": [
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      "url": "/SciPostPhys.12.2.066",
      "title": "Time-reversal symmetry breaking and emergence in driven-dissipative Ising models",
      "author_list": "Daniel A. Paz, Mohammad F. Maghrebi",
      "abstract": "Fluctuation-dissipation relations (FDRs) and time-reversal symmetry (TRS),\r\ntwo pillars of statistical mechanics, are both broken in generic\r\ndriven-dissipative systems. These system
      "doi_label": "SciPostPhys.12.2.066",
      "publication_date": "2022-02-17"
    },
    {
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      "title": "The $U$-plane of rank-one 4d $\\mathcal{N}=2$ KK theories",
      "author_list": "Cyril Closset, Horia Magureanu",
      "abstract": "The simplest non-trivial 5d superconformal field theories (SCFT) are the\r\nfamous rank-one theories with $E_n$ flavour symmetry. We study their $U$-plane,\r\nwhich is the one-dimer
      "doi_label": "SciPostPhys.12.2.065",
      "publication_date": "2022-02-17"
    },
```

Software repo hosting

@ git.scipost.org

Documentation

@ docs.scipost.org

Docs » SciPost

View page source

Next ⊙

SciPost

Welcome to SciPost's infrastructure documentation!

What is SciPost?

The SciPost project aims to transform academic publishing through the creation, operation and maintenance of a full-fledged, top-quality, open-sourced and academically-run infrastructure.

By building the machines and leaving the keys in the hands of academia, we intend to provide scientists worldwide with a healthier publishing and evaluation workflow, free of profiteering or further non-scientific interests.

Who are these pages intended for?

The documents listed here are primarily meant for good-willed geeks, techies or the plain curious.

Perhaps you are an academic and want to see the insides of what we've built for you and your community. Perhaps you happen to be a good web developer who feels like helping out. Perhaps you are one of our potential sponsors and want to check out how we do things, and how transparent our activities really are. Perhaps you are working for an organization which feels threatened by what we do, how we do it, and where it is all going.

Search docs

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The SciPost Foundation
Infrastructure team
Codebase
Deployment

Community discussions
@ disc.scipost.org

Sci|Post

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Topic		Replies	Views	Activity
📌 **Welcome to SciPost's Discourse** A forum for users of SciPost in particular, and all interested in open science in general. Here, you will find discussions on lots of topics of relevance to the SciPost initiative: improvement suggestions, development i... read more		0	277	Apr '21
How to create inline or "online" citations?	E A	1	128	Nov '21
Refereeing guidelines ■ Editorial	C	2	318	Oct '21
Journals structuring ■ Editorial	V A	3	409	Sep '21
Referee communication preferences ■ Editorial	A	5	461	May '21
Exploration/request for feedback: SciPost implementing a community OAeX-inspired derivative of our business model? ■ Sponsors & business model		0	312	Apr '21
Gathering sponsors ■ Sponsors & business model		0	236	Apr '21

Difficulties

- The impact factor
- Securing funding

The impact factor

Without doubt the deadliest poison against innovation in publishing.

The **least qualified** person to judge quality at SciPost, is still **more qualified** than the **most qualified** at the IF provider.

Our progress is crushed by lack of reform of the rewards system.

Obtaining sustainable funding

- a mountain of work to initiate/obtain
- money streams facilitate APCs, don't know what to do with Diamond
- commitments typically small-scale, without long-term perspective; sustainability "in the balance"; growth prospects severely limited
- sometimes come with such admin overhead as to negate the benefits

Sci|Post

Obtaining sustainable funding

That said: we ARE receiving support from lots of generous/adventurous sponsors!

scipost.org/sponsors

Lessons

Reform of publishing: too slow & misdirected

- barely making measurable progress on solving problems from decades ago
- starting new initiatives is unnecessarily (but deliberately?) hard, incumbents favoured
- corporate side is still "pumping all the money" with "easy solutions"
- ... and is forging ahead with next-generation infrastructure with some nasty features
  (c.f. recent disclosures on tracking tech)

Lessons

- If we want Diamond to take its rightful place, we need to substantially upscale, consolidate and sustain its funding
- Stop facilitating APCs
- Turn to Diamond, and keep it simple
- Tune up your bullshit filter when dealing with corporate lobbyists

Final thought

*Open Access Publishing is like **Linux***

Parallels are evident:

- It's the better OS, but "less easy" to use
- It's competing against huge corporations...
- ... who are experts at customer "lock-in"
- It's a fragmented community
- It's only adopted by a minority, despite the compelling technological, privacy, flexibility, customizability, and... cost advantages

Jean-Sébastien Caux
@jscaux

I recently abandoned Apple and moved back to Linux.

It's like leaving a multicolour candy superstore and setting out in the 🇨🇦 wilderness.

Sure, I have to paddle harder and there are some mosquitoes, but I tell you: the air is much fresher and the vistas way more beautiful.

The SciPost Team

J-S Caux	Founder; developer	Paula Perez	Admin (editorial)
Joost van Mameren	Secretary	Sergio E. Tapias Arze	Admin (editorial)
Jasper van Wezel	Treasurer	Jan Willem Wijnen	Sponsors
		Thijs de Goede	Assistant (editorial)
		George Katsikas	Production

Thanks!