What is JACoW and What Does It Offer To Your Conference

David Button – On Behalf JACoW

Australian Nuclear Science and Technology Organisation

JACoW Team Meeting 2023

Hosted by NSRRC

HsinChu City, Taiwan from November 28th to December 1, 2023

Disclaimer

Many aspects of this talk may contain traces of "Todd Satogata"

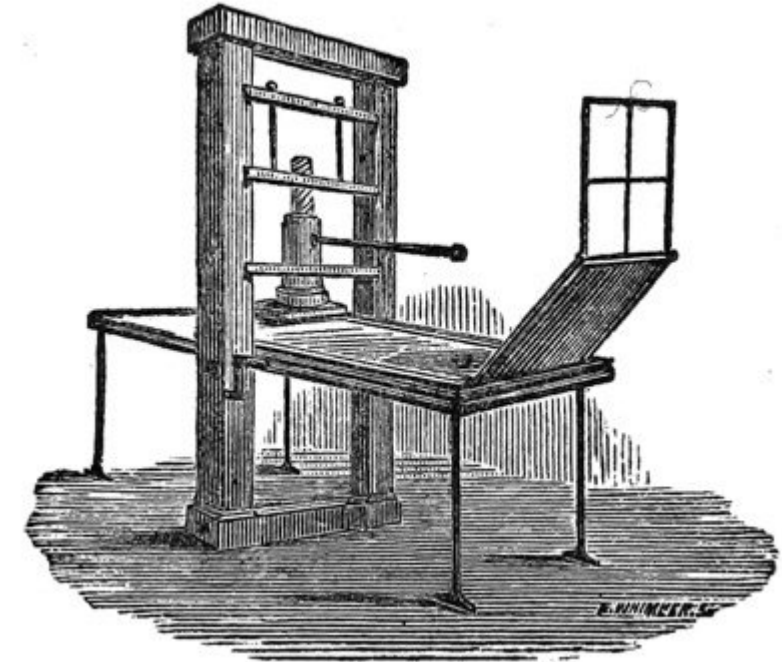*Plagiarism is unavoidable due to JACoW extensive legacy!*

How the world changed....

Printing Powers the Scientific Revolution

TABLES FROM POLISH ASTRONOMER NICOLAUS COPERNICUS' PIONEERING TEXT "DE REVOLUTIONIBUS ORBIUM CAELESTIUM" (ON THE REVOLUTION OF HEAVENLY SPHERES), 1543, WHICH REPRESENTS HIS COMPLETE WORK.

The English philosopher Francis Bacon, who's credited with developing the scientific method, wrote in 1620 that the three inventions that forever changed the world were **gunpowder**, the **nautical compass** and the **printing press**.

"the printing press introduced the world to the idea of machines "stealing jobs" from workers"

Conferences Before JACoW
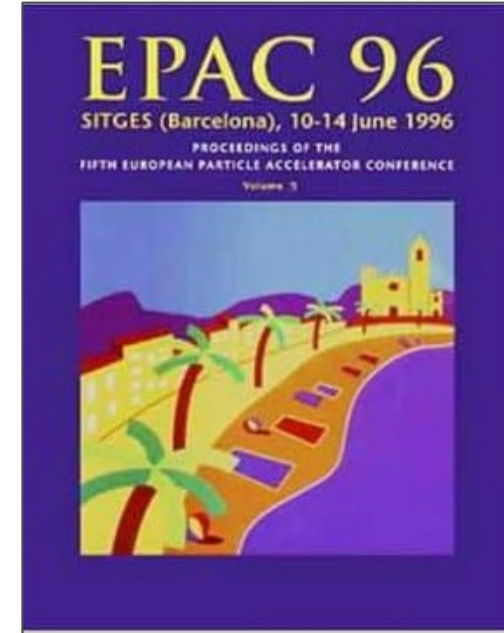
Jana Thomson Office TRUMF

Conferences once printed all their proceedings
- (Nearly) all the delegates got a printed, shipped copy
- We'd send people to conferences to get proceedings!
- Printing, shipping was a big piece of the conference budget

Cost to access

Proceeding copies sold through e.g. Curran Associates, Amazon

Other hardcopies US$100-300 (or less) for recent IPACs

Was a large portion of registration fee when all delegates received a printed copy (in the "old days")

The Milestones on the Path

Internet Users: 1993-2016

- 1990-1: World Wide Web (CERN)
- 1993: PDF and Acroread made free (Adobe)
- 1993: Commercialization of Linux (redhat)
- 1994: 100 MHz PC processors (Intel)
- 1995-2000: Dot Com Boom
  - Internet usage/access grows 25x: 15M to 350M
- PAC'95 (Dallas): Camera-ready publication (paper)
- EPAC'96 (Sitges): Full electronic publication (CERN)
  - Templates, on-site editing, dot board (author "education")
- PAC'97 (Vancouver): The birth of JACoW
  - Founded by APAC'98, EPAC'98, PAC'99

What is JACoW?

Joint Accelerator Conferences [on the] Website

The Beginnings: In the mid-nineties, with the arrival of **electronic publication**, PAC'95 and EPAC'96 were the first accelerator conferences to try their hand at **publishing proceedings themselves**.

In 1997 the JACoW collaboration was created under the chairmanship of CERN's John Poole, with Christine Petit-Jean-Genaz as CERN secretary.

An Original Confluence of Personalities

Ilan Ben-Zvi

PAC'99

John Poole

Yong-Ho Chin

APAC'98

Bob Siemann

PAC'95

Lief Liljeby

Martin Comyn

EPAC'98

PAC'97

Christine Petit-Jean Genaz

EPAC'96...
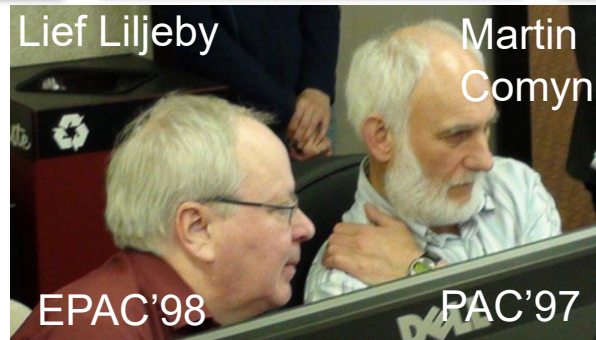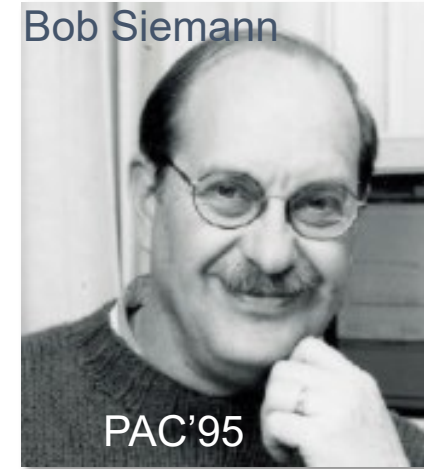
Comparison As of 21 Nov 2023

International Conference Proceedings Series (acm.org)

Association for Computing Machinery (ACM) publishing arm
$750 + $20 per paper over 30
$750 + $20 x 1400'ish = **$28-30k** ($USD)
Reasonably comparable to JACoW costs!
BUT they have their own copyright, and require subscription for access
JACoW is better at a comparable up-front cost (and lower total cost)

ACM Digital Library Access

2 Pricing

Pricing and access depends on your membership or subscriptions with ACM.

Purchase this Article:
Use of CPU Performance Counters for Accelerator Selection in HLS-Generated CPU-Accelerator Systems

Bain A. Syrowik, Blair Fort, Stephen D. Brown

Purchase Article		
	Non Member	$15.00
	ACM Professional Member	$10.00
	ACM Student Member	$5.00

ALREADY AN ACM MEMBER? SIGN IN OR BECOME A MEMBER

Price: **$0.00**

Continue →

← Cancel & Go back

Comparison ACM ICPS ($USD)

New Open Access Publishing Model for ICPS Coming in 2024
In January 2024, ACM will be introducing a new Open Access publishing model for ICPS. Please refer to the FAQs for an overview of the new model. Full details of the publishing model are provided below.

The new Open Access (OA) publishing model for ICPS will apply to all conferences for which the formal Call for Papers will be issued on or after January 1, 2024.

Article Process Charges (APC);
- If the corresponding author is affiliated with an institution in a lower-middle-income country (as defined by the World Bank) and at least one of the paper's authors is an ACM member, the applicable APC is **$350 per paper**.

- If the corresponding author is affiliated with an institution in a lower-middle-income country (as defined by the World Bank) but none of the paper's authors is an ACM member, the applicable APC is **$500 per paper**.

- If the corresponding author is not affiliated with an institution in a lower-middle-income country but at least one of the paper's authors is an ACM member, the applicable APC is **$700 per paper**.

- In all other cases, the applicable APC is **$1,000 per paper**.

Association for Computing Machinery (ACM) Open Access
$ 700 per x 700 articles = $490,000
$1,000 per x 700 articles = $700,000
Cost to Participants = Could be as high as **$1,190,000**

*"The ACM OPEN model was developed with this challenge in mind. Rather than basing cost on the exact number of articles published each year, which is typically multiplied by an agreed APC price **(~$2,500 - $3,000 per article** for many of the large for-profit commercial publishers) to arrive at the total annual deal value to be paid to the Publisher"*

New Open Access Publishing Model for ICPS Coming in 2024 (acm.org)

Comparison ACM ICPS ($USD)

Fixed price subscription contracts currently proposed

The tier bands and pricing for new subscribers from January 1, 2023 onwards are as follows:

Tiers Level	Article Output Range	Tier Pricing ($)
1	75+	$95,000
2	60-74	$70,000
3	40-59	$50,000
4	30-39	$35,000
5	20-29	$25,000
6	16-19	$20,000
7	12-15	$15,000
8	8-11	$12,000
9	4-7	$9,500
10	0-3	$7,000*

JACoW Has Always Been Open Access!

Free Creative in Common Open Access

What are the JACoW Goals

http://www.jacow.org/About/GoalsOfJACoW

- Publish high-quality sets of proceedings with access through the custom interface.
- Provide long-term archival storage to ensure longevity and access to publication data.
- Publish conference metadata for open archives.
- **Train and educate editors** and authors. *Not "provide!"*
- Provide and maintain a repository of user profiles for accelerator conferences.
- Provide support for conference organizers.
- *Maintain and lead community key investment in tools and infrastructure?*

Consistent core goals since the founding of JACoW

What are the Requirements of JACoW?

http://www.jacow.org/About/PoliciesRequirementsForPublishingOnJACoW

- CC-BY 4.0: https://creativecommons.org/licenses/by/4.0/

- Editor/IT participation in Team Meetings (3yr cycle)

- Technical paper requirements
  - PDFs: proper metadata / margins / paper size / font embedding / version compatibility

- Indico use *not* required
  - Use of Indico and repository requires agreement on repository privacy, quality, integrity
  - Indico new model still evolving

The JACoW Charter

- JACoW operates according to the rules and policies of the JACoW Charter, documented on jacow.org

- The charter defines *less* what JACoW *does,* and *more* how JACoW *operates.*
  - Board of Directors composition, elections, responsibility and authority
  - Annual Team Meeting
  - Annual Stakeholder's Meeting
    - (Nearly) always at IPAC to attract broadest audience

  - "The existence of the JACoW site does not detract from the rights of individual conference organisers to publish their proceedings on other web sites, storage media or hard copies of their choice."
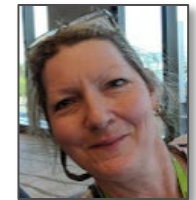
What is JACoW? <u>A Website</u> (or more)

- Joint Accelerator Conferences on the Web(sites)
  - Proceedings hosted by CERN and KEK
  - JACoW wiki/website hosted by Elettra
  - SPMS Proceedings scripts (Volker)
  - SPMS servers hosted by CERN, KEK
  - Indico server hosted by CERN
  - Upload/download servers hosted by PSI, Jefferson Lab
  - Legacy SPMS code (formerly supported by FNAL)
  - Source code, request tracking hosted by sourceforge
    - With investment in a functionality merge with Indico
  - Reference Search Tool and Cat Scan Cloud Host supported by ANSTO (Josh Peters)
  - JICT JACoW Indico Conference Tool by Elettra (Stefano)
- We cannot hope to achieve our goals without the resources (hardware and time) provided by the support of national labs and conference series

What Is JACoW? A Collaboration

- JACoW is an international collaboration
    - Dedicated to prompt high-quality publication of accelerator science conference proceedings

    - Many stakeholders:
        › Users of JACoW proceedings/papers
        › Institute representatives (Institutional "stakeholders")
        › Conference representatives/organizers
        › JACoW Team and Board of Directors

    - There is often much overlap among all classes of stakeholders

Collaboration, what does it give you?

- Collection of collaborators with shared goals and needs
- Grow together, uplifting the wider community
- Talent development, and growing networks internationally
- Self-sufficiency, community ownership
- De-facto sponsorship of conferences by the community in kind
- The collective can achieve far more than the individual, sharing resources and services we have a more economical advantage

- As a JACoW Team Member you are a collaborator, not client

Building up Team Members

- **Knowledge.** What you know and understand
- **Skills.** How you apply what you know
- **Network.** The people you know and can collaborate with
- **Resources.** What you have in terms of assets and tools
- **Reputation.** How the world perceives and values you

Join us at the bar….

JACoW Team Meeting, Knoxville USA, 2022

"Here we see the team members of the JACoW collaborator in their natural habitat. These beautiful people migrate from all corners of the planet, congregating in a bar which is just an extraordinary wonder of the accelerator community"

IPAC'23 JACoW Team (Venice)

- **WE** are members of the JACoW team
  - Producing excellent, prompt proceedings for international conferences in good camaraderie
  - Coordinating support for proceedings production
    - › Author reception, IT, presentation management, etc

?

Red Dotted Author....?

JACoW: Producing Excellent Proceedings

eeFACT2022 — Proceedings of the 65th ICFA Advanced Beam Dynamics Workshop on High Luminosity Circular e⁺e⁻ Colliders

SRF2023 — Proceedings of the 21st International Conference on RF Superconductivity

IPAC'23 — Proceedings of the 14th International Particle Accelerator Conference

FEL2022 — Proceedings of the 40th International Free Electron Laser Conference

CYC2022 — Proceedings of the 23rd International Conference on Cyclotrons and their Applications

PCaPAC2022 — Proceedings of the 13th International Workshop on Emerging Technologies and Scientific Facilities Controls

IBIC2022 — Proceedings of the 11th International Beam Instrumentation Conference

NAPAC2022 — Proceedings of the North American Particle Accelerator Conference

248 conferences and workshops on jacow.org as of this writing (+74,000 papers)

~8 since last TM

Recommended Inspirational Reading

「加速器」Vol. 12, No. 3, 2015（152−161）

話 題

THE JOINT ACCELERATOR CONFERENCES WEBSITE, JACoW: AN OPEN ACCESS WEBSITE FOR THE PUBLICATION OF CONFERENCE PROCEEDINGS IN ACCELERATOR SCIENCE AND TECHNOLOGY

Christine Petit-Jean-Genaz*

INTRODUCTION

The Joint Accelerator Conferences Website (JACoW), at http://www.JACoW.org came into being in the mid-nineties with the publication of the first electronic set of European Particle Accelerator Conference (EPAC) proceedings on the World Wide Web, on a server located at CERN. The publication of that first set of conference proceedings 18 years ago has developed into an international collaboration in electronic publication of accelerator science and technology conference proceedings, with at the time of writing, 18 collaborating conference series and 167 sets of proceedings published. The story of how this came about, and the lessons learned along the way, are described by the author who has been part of this exciting adventure from the earliest days. This article will avoid detail of the technicalities of electronic publication, which are fully documented at the site mentioned above. It will simply tell the tale of JACoW, the people involved and their adventures.

ONCE UPON A TIME ...

As the era of electronic publication dawned in a world where the Web was still largely unknown, the PAC'95 and EPAC'96 editors prepared to embark upon totally new proceedings production methods using Adobe Acrobat software, then in

proceedings production since 1988, were encouraged by Steve Myers, CERN, a Chair of the early EPAC Organizing and Scientific Programme Committees, to prepare the way towards electronic publication of EPAC proceedings for publication on CD-ROM.

Since the first big event embarking on electronic publication was to be PAC'95, John and I asked Bob Siemann[†1], SLAC, the PAC'95 Scientific Programme Committee Chair, for permission to join the proceedings office team in Dallas, Texas and to visit SLAC following the conference to get hands on experience processing the contributions.

PAC'95 authors had been asked to hand in their contributions to the conference proceedings on diskettes together with a hard paper copy. Figures 1 and 2 show examples of a diskette and a CD-ROM for younger readers. More mature readers will be reminded of how much our tools and technology have

Figure 1: Reminder of what a diskette looked like in the mid-nineties.

JACoW
Joint Accelerator Conferences Website
http://www.JACoW.org/

A Short History, its Status and Aims

as Volker would put it, "Joint Accelerator Conferences on the Web"

John Poole
Trieste, December 2003

http://epaper.kek.jp/jacow/TM_2003_Trieste/slides/Seminar-JP.pdf

http://www.jacow.org/uploads/About/Article_KASOKUKI.pdf

Thank You!

IPAC'22 Editorial Team

2021 JACoW Team Meeting

IPAC'19 salt mines
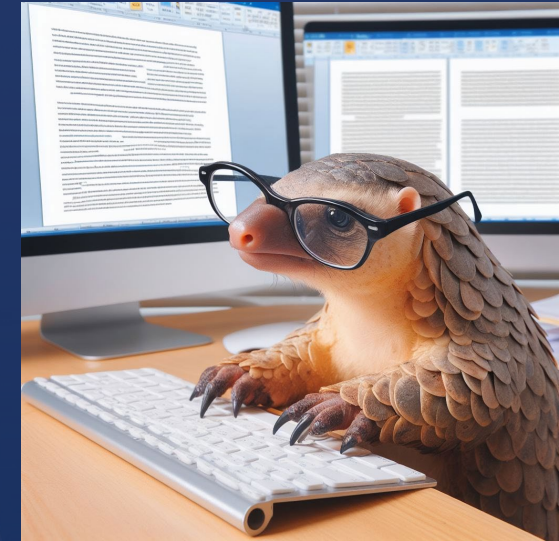
STO

Big thank you to
National Synchrotron Radiation Research Center (NSRRC) Taiwan Team

IPAC'25 Pangolin LaTeX Editor
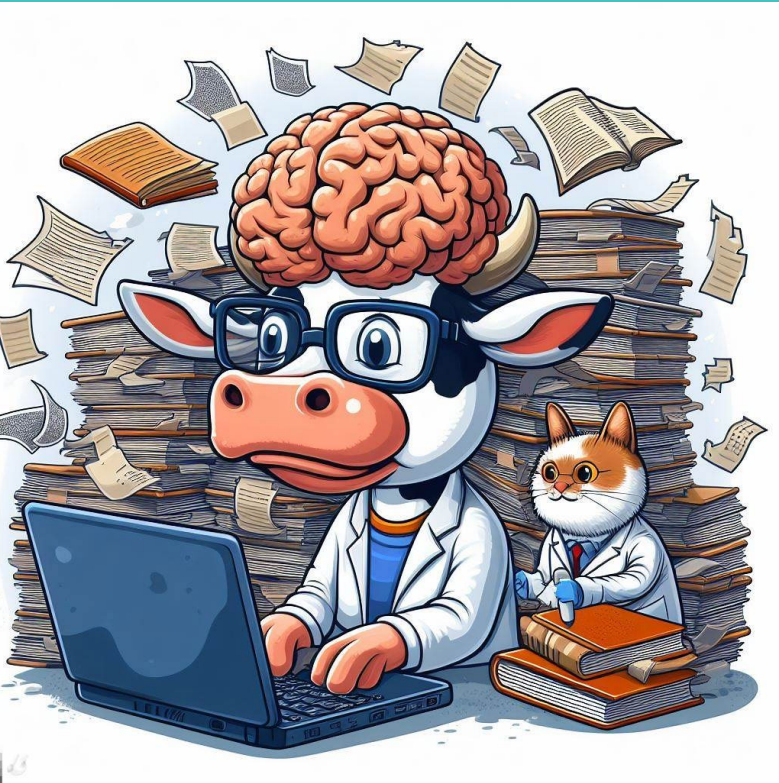
Pangolins Make the Best Debuggers

IPAC'25 Pangolin Editor Team

Our **JACoW** Seems to be **Evolving**

Ind-CoW