

# JACoW Team Meeting 2021

## Report from a scientific secretary

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# Overview

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- My first experience of joining the JACoW Team
- JACoW's role in conference organising and publication
- Review of Linac2020
  - what did or didn't work well?
- Moving forward for Linac2022

# My first experience of joining the JACoW Team

- JTM'18, Cape Town
- Only joined the LINAC LOC 6 weeks prior to replace the former scientific secretary.
- I had very few expectations of the team meeting before coming.
- Upon arrival, people start welcoming me to “The Family”...



# My first experience of joining the JACoW Team

- It was immediately clear that the JACoW Team was a very close-knit community.
- If you regularly attend conferences as a delegate, it can be very easy to overlook the importance of the JACoW Team!
  - Small invisible army behind the scenes
  - Able to publish ~1300 papers by the end of the conference for IPAC
  - But there is far more to it than just this...



# JACoW's role in conference organisation and publication

- Todd gave a great talk on **what** JACoW is on Tuesday.

- Everyone sees JACoW differently:

- JACoW is more than the sum of its parts:

- Scalable model of conference organisation

- From 10s to 1000s of delegates

- A community of support

- A means of knowledge transfer

- Within series

- Within community

- JACoW are **NOT** conference organisers



# JACoW's role in conference organisation and publication

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- The full extent of JACoW's contribution is very hard to quantify as it is so far-reaching.
- For myself, some of the features that are most relevant to me are:
  - SPMS
  - Cat Scan + Reference Search
  - Team meetings
  - Conference timetable
  - Editorial team
  - ...

# Cat Scan + Reference Search

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- My first editorial experience was at SRF'19.
- Cat Scan and Reference search had both been used to good effect at IPAC'19
- Despite having no prior experience to compare with, it was clear that these tools were game-changers!
  - This was shown by the editorial work being completed about a day early!
- The editorial experience was one of the most rewarding and enjoyable conference experiences I've ever had
  - I'll admit I had assumed it would be much more boring, stressful and thankless than it really was!

## Team meetings

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- Great way to meet other team members.
  - Essential for developing the contacts you need to help you through your conference organising journey.
  - Who to speak to about specific issues
  - Identifying who you would like on your editorial team etc...
- Good for knowledge transfer
  - A representative (usually scientific secretary) for each conference is expected to attend at least 3 JTM's (2 before, 1 after).
  - The two before allows for knowledge transfer from the previous conference in the series, the one after allows you to train the next conference.
  - Expert training on some of the technical aspects of editing and proceedings publication



# Looking at how JACoW supported LINAC2020

- Covid made for a VERY unpredictable run up to the conference...
- We FAR exceeded the limit on emails to the LINAC mailing list (with permission from JACoW...)
  - 27 January 2020 – conference announced (accidentally sent twice...)
  - 31 March 2020 – abstract submission extended due to covid
  - 02 July 2020 – postponement of conference due to covid
  - 30 July 2020 – announcement of a replacement virtual conference
  - 21 August 2020 – final reminder of registration



Interesting to note that the final reminder did actually make a difference\*

\*there are plenty of additional factors at play here

# Looking at how JACoW supported LINAC2020

- While we noted that the final reminder did make a difference and by the start of the conference, we had about double the previous record number of delegates for the conference series.
  - However, it's likely that all isn't as it seems...
    - Conference was free
    - People pre-occupied with covid, so a reminder may have helped rather than pestered in this case
    - Virtual, so travel restrictions don't apply



# Biggest challenge: setting up registration (twice!!)

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- Registration 1: In-person conference
  - Set up SPMS to forward delegates to external registration page
  - However, the external page cannot send back the metadata required by SPMS to complete the registration
    - Many discussions about this with PCO (Worldspan) to no avail.
  - Had to regularly check the Worldspan registration list and update delegates on SPMS
    - Not ideal, but it works...
- Will need to do a similar method for LINAC 2022
  - Though Worldspan have agreed to send me regular lists of NEW delegates to save time.

# Biggest challenge: setting up registration (twice!!)

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- Registration 2: Virtual conference
  - SPMS to forward delegates to Zoom to register and relay information back to SPMS.
  - Managed to send data to Zoom, but couldn't retrieve it.
  - No easily accessible list of delegates for me to access to update the list on SPMS.
- Take 2...
  - Register in SPMS
  - Put the Zoom link in the automated registration confirmation email
    - Tells delegates to register again on Zoom as a 2<sup>nd</sup> stage of registration
    - Bug in SPMS prevented us editing the automated email text.

# SPMS Bug

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- In a normal year, the bug in SPMS would have just been a minor inconvenience that would have been ignored
    - For us, it was an essential part of our 2-stage registration
  - Instead, needed to do registration in SPMS
    - Close registration a few days before the conference
    - Send out an email to all delegates with the Zoom link stating that they needed to register on Zoom as well
  - This largely worked well
    - Of course, some people didn't follow instructions or didn't receive the email (or it went to the junk folder etc).

# Things I learned about the conference

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- The difference between BST and GMT!
  - In our invite, we stated times as GMT rather than BST and got an influx of emails questioning this...

# Organising a conference from scratch in 10 weeks

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- Clearly not as involved as a normal conference, but put a lot of strain on people
  - Particularly the SPC, scientific secretary and IT/media support services
- Used pre-recorded videos that needed to be submitted at least 24 hours in advance
  - SPC chair did QA on these and returned to speaker if too long or other issues
  - SS (me!) needed to be on-site to run the videos during the conference
- Opted for a 4 half-day event to ease pressure on delegates around the world
- Delegate feedback suggests the conference was very well received

# LINAC 2020 programme

Tuesday		Wednesday		Thursday		Friday	
TJA	Chair: Graeme Burt	WEA	Chair: Frank Gerigk	THA	Chair: Lars Groening	FRA	Chair: Hongwei Zhou
	<p><b>Introduction and Welcome</b> Peter McIntosh, STFC, Chair IQC Carsten Welsch, U Liverpool, Chair LOC Graeme Burt, U Lancaster, Chair SPC</p> <p><b>The Compact Linear Accelerator for Research and Applications (CLARA) at Daresbury Laboratory: Susan Smith (STFC)</b></p> <p><b>FRIB construction, installation, SRF and beam commissioning: experience and lessons learned: Jie Wie (FRIB)</b></p> <p>Performance and Operational Experience with the European X-FEL Linac: Nick Walker (DESY)</p> <p>Update on Fermilab's PIP-II Project: Lia Merminga (FNAL)</p>		<p>Development of Superconducting Linac Technology in India: Purushottam Shrivastava, RRCAT</p> <p>Dislocation dynamics their role in high-gradient phenomena: Jan Paszkiewicz (Oxford/CERN)</p> <p>Collaborative developments with industry for advanced accelerator applications: Anthony Gleeson (STFC)</p> <p>Design and experimental validation of a mm-wave woodpile-based dielectric structure for accelerators: Giuseppe Torrisi (INFN)</p> <p>Technological Advancements in Material Handling for High-Gradient Operation of an innovative braze-free accelerating structures: Luigi Fallace (INFN)</p> <p>Innovative Radiometric Diagnostics for Future Linear Accelerators: Joe Wolfenden (JULIV)</p>		<p>Commissioning of simultaneous top-up injections into 4 + 1 storage rings at KEK injector linac: Fusashi Miyahara, KEK</p> <p>High-efficiency ultra-short pulses from infrared FEL oscillators for an attosecond X-ray source with high-harmonic generation: Ryoichi Hajima (QST)</p> <p>A high brightness RF gun development for the SuperKEKB collider: Xiangyu Zhou, KEK</p> <p>High repetition rate RF guns: Boris Miltsyn (STFC)</p> <p>Commissioning of high power linear induction accelerator for X-ray flash radiography at BINP: Danila Nikiforov, BINP SB RAS</p> <p>Novel experiments at CLARA: Deepa Angal_Kalinin (STFC)</p>		<p>Beam reliability and stability studies in superconducting high power protonlinacs: Yuan He (IMP)</p> <p>Commissioning of Superconducting Linac Booster for Heavy-ion Linac at RIKEN: Osamu Kamigaito (RIKEN)</p> <p>Demonstration of High Current Deuteron Acceleration for the LIPAC 5MeV RFQ: Keishi Sakamoto, QST</p> <p>Beam commissioning of SPIRAL2 linac: Robin Ferdinand (CEA)</p> <p>Brilliant beam acceleration at longitudinal phase advances far beyond 90°: Anna Rubin (GSI)</p> <p>Recent development of medical linacs for high income and low-middle income countries: Manjit Dosanjh (CERN)</p>
	15:30 Coffee		15:30 Coffee		15:30 Coffee		15:30 Coffee
TUP	Chair: Sami Tantawi	WEP	Chair: Fulvia Pilat	THP	Chair: Marion White	FRP	Chair: Graeme Burt
	<p>Status and perspectives of ESS linac: Hakan Danared (ESS)</p> <p>Overview of High Power RFQ issues and solutions: Pisent (INFN)</p> <p>Transition between different acceleration sections of Hadron Linacs: Michele Comunian, INFN</p> <p>Status of MYRRHA fault tolerant linac project: Frederic Bouly (LPS)</p> <p>High Power normal-conducting linacs upgrade in US: Deepak Raparia, BNL</p> <p>Overview of linacs for compact neutron sources: David Baxter (IUCF)</p> <p>SNS Proton power upgrade (PPU) and operational experience: Mark Champion (ORNL)</p>		<p><b>Women in Science and Engineering (WISE): Should I stay or should I go now?</b></p> <p>CBETA: The first Multipass SRF Based ERL: Colwyn Gulliford (Cornell)</p> <p>First linear acceleration of relativistic electrons using THz waveguides: Darren Graham (UMAN)</p> <p>Accelerator on a CHIP: Dylan Black, Stanford University</p>		<p>Superconducting Twin-Axis Cavities - Development and Applications: HyeKyung Park (ODU)</p> <p>Particulate field emitters in CEBAF: from root-cause studies to mitigation solutions: Rong-Li Geng (Jlab)</p> <p>Overview of Plasma Processing programs in the SRF community: Marc Doleans (ORNL)</p> <p>Progress in Nb3Sn: on the edge of the technology revolution in SRF cavity performance: Sam Posen (FNAL)</p> <p>SRF R&amp;D for the LCLS-II High Energy Upgrade: Daniel Gonnella (SLAC)</p> <p>Distributed coupling Linacs from room temperature to Superconducting: Mamdouh H. Nasr, SLAC (Linac 20 student prize winner)</p> <p>CW RF Gun Development: Bruce Dunham (SLAC)</p>		<p>High Energy ERLs for Electron Cooling: Stephen Benson (Jlab)</p> <p>S30XL (aka DASEL): a new beamline for dark sector exploration: Thomas Walter Markiewicz, SLAC</p> <p>Status of the LCLS-II CW X-ray FEL: Yuantao Ding (SLAC)</p> <p>High Power Conditioning and Breakdown Studies in Coupled Accelerating structures: Lee Millar (Lancaster) (Linac20 2nd prize winner talk)</p> <p>Science case for FELs: Jon Marangos (Imperial)</p> <p>Overview of machine learning effort for particle accelerators: Andreas Adelmann (PSI)</p>
	18:10		17:50		17:50		17:40
			Close				Closing session

Orange	Opening/Closing
Green	Electron Machines
Blue	Proton & Ion machines
Grey	Technology
Yellow	Beam Dynamics, Extreme Beams, Sources and Beam related technology



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- Not many photos that I can show as the event was online
  - Opted not to have a conference proceedings
    - Having the editorial team together would have been almost impossible due to the pandemic
    - A remote editorial team seems impractical given the specialist IT requirements etc
  - Agreement with next LOC (Argonne National Lab) to postpone them to 2024 so we can attempt an in-person conference in 2022.

# Looking forward to LINAC 2022

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- For LINAC 2022, we are planning a hybrid conference
  - Online delivery of talks.
  - Primarily aimed at inclusivity from delegates with travel restrictions
  - Fee for online delegates to encourage in-person where possible
- It is likely that future conferences will incorporate a hybrid programme
  - Major advancement in technology during covid
    - Teams, Zoom etc...
  - Push for institutes to reduce carbon footprint
    - Likely to result in less international travel
    - Likely to make the full “in-person model” unsustainable
  - Many universities looking to adopt a permanent hybrid teaching model

# Hybrid conference model

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- Should consider adapting the “JACoW model” for hybrid and online delivery to meet the needs of the conference
  - How to ensure online delivery not at expense of in-person conference?
  - How to allow virtual delegates to submit papers?
    - How can both virtual and in-person delegates view all posters?
    - How to “police” posters?
  - Can we accommodate both in-person and remote speakers?
  - How should talks be delivered virtually?
    - Live streaming?
    - Upload recordings after sessions?
    - Live Q&A after sessions?
  - IPAC’20, LINAC’20, IPAC’21 all had different styles
    - Lessons can be learned from each style, which pros and cons from each

# The family

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- At the beginning, I mentioned the family and newcomers will have probably heard this term thrown about during the week.
  - At first I really didn't get the concept or meaning and it took a while
- JACoW is a lot of things to a lot of people
  - It is a system that has worked for a very long time
  - JACoW success is largely thanks to the passion and hard work from a relatively small group of people
    - But the impact is felt by thousands of accelerator scientists around the globe
- Whenever I have had questions or issues, there is always someone you can talk to for help or advice

## Closing remarks

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- This has been a very difficult and unprecedented time for everyone
  - We were lucky to be able to hold an event, albeit online
- JACoW constantly strives to improve the conference model
  - Recent examples include Cat Scan and Reference Search
  - The conference paper template is constantly changing slightly
  - Is it time to adapt to changes in conference format?
- LINAC 2020 was a success despite major setbacks
  - The online format worked well, though we did need to sacrifice a proceedings for that
  - Our 2022 hybrid conference hopes to have the best of both worlds

Thank you!

Any questions?

