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Commentary

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Transitioning to sustainable academic conferences needs more experimentation and reflection

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Non-technical summary

Accelerated decarbonization of academic conferences is necessary and urgent. Despite the window of opportunity that COVID-19 created for rethinking conferences, there is a risk of slipping back into old habits now that restrictions are lifted. This commentary reports on recent experiences with a unique, sustainable approach to academic conferencing involving an international partnership and hub model across three continents. There is a need to continue to experiment with and implement new modes of sustainable academic conferencing.

Technical summary

In response to increasing demands to move away from carbon-intensive academic conferences, and a need to address social justice issues, the author-team designed, implemented, and experimented with a new conference model. Three key-design choices informed the model. First, instead of the common single-host-single-location approach, we established a partnership between three universities across three continents. Second, we adopted a hub model of three online conference days, followed by three non-hybrid, in-person only conference days. Third, we sought to accommodate global participation by organizing each of the online conference days during daylight hours in the respective time zones. We find that the model promotes less air travel and improved global south participation. Our approach adds to a growing number of experiments with new modes of academic conferencing in a world that is facing climate and inequality crises.

Social media summary

Decarbonizing academic conferences is necessary and urgent. This commentary reveals experiences with a hub-based format.

Accelerated decarbonization of academic conferences is necessary and urgent (Funke & Lago, 2022). Despite the window of opportunity that COVID-19 created for rethinking conferences, there is a risk of slipping back into old habits now that restrictions are lifted. There is a need to continue to experiment with and implement new modes of academic conferencing that combine the benefits of online and in-person experiences.

Academics consider conferences a vital part of their practice (Engelbrecht et al., 2022). Face-to-face conferences, relying on participants traveling to a central conference venue, often internationally, are the dominant model. COVID-19 disrupted this model, forcing conferences to shift from physical to online participation, triggering scholarly reflection on new modes of conferencing (Skiles et al., 2021). In-person conferences are expensive, emission-intensive, time-consuming, and inequitable (Yates et al., 2022). Online conferences facilitate participation of those with financial or physical constraints, or caring responsibilities, but interactive social networking in online environments remains challenging (Raby & Madden, 2021). Improved design of conferencing platforms targeting social interactions can overcome some of these challenges but cannot replace the in-person conference experience yet (Bastian et al., 2022). Targeting audiences and presenters in multiple time-zones further complicates online conferences (Mori, 2020). Hybrid conferences have been proposed as a

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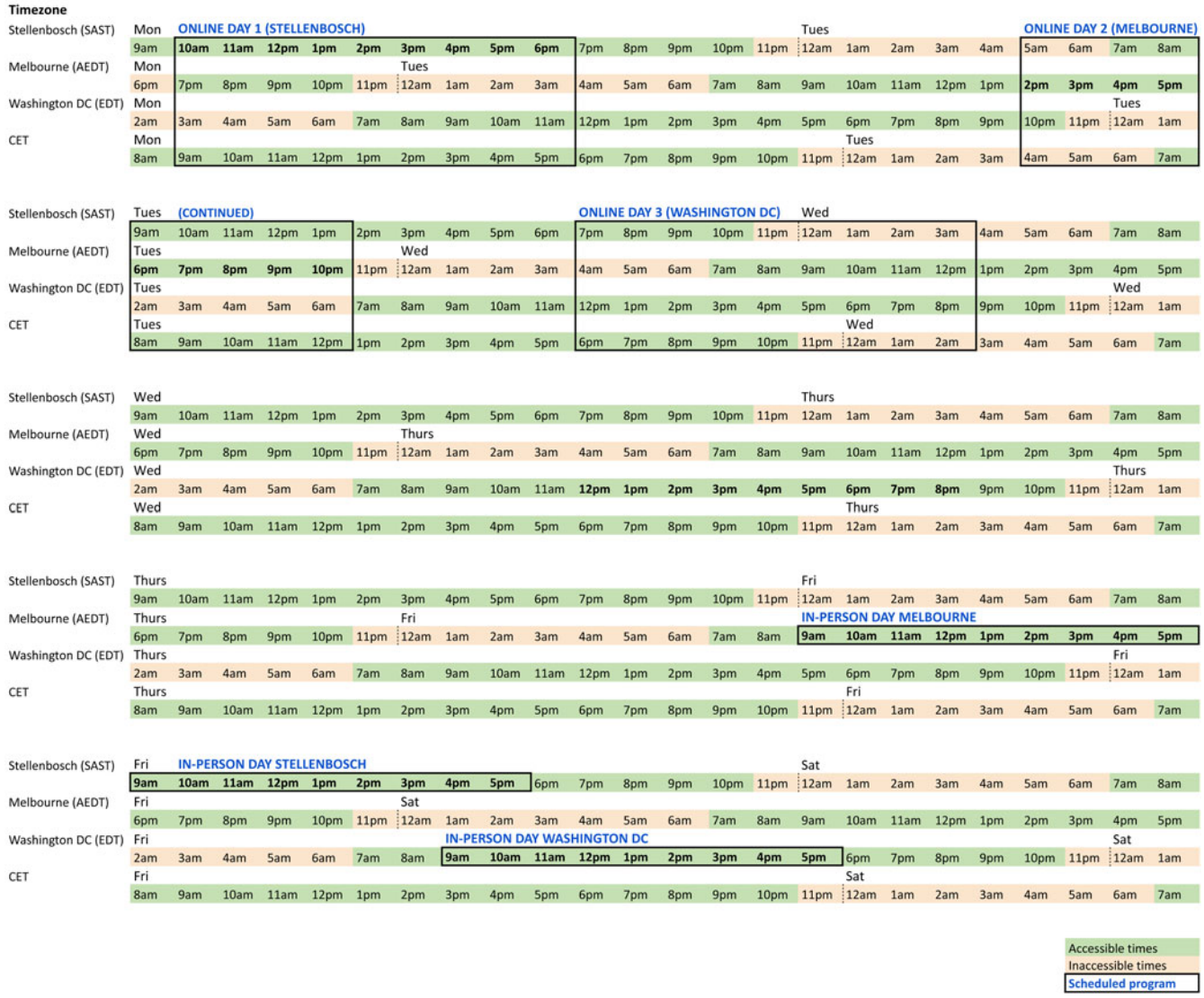


Figure 1. Conference planning chart.

solution (Yates et al., 2022). Overall, the literature on and evidence of more sustainable and socially just conferencing modes remains limited.

We share lessons from organizing a unique intercontinental conference in 2022. The International Sustainability Transitions conference is the annual gathering of the Sustainability Transitions Research Network – a global scholarly community of over 3,000 researchers. Traditionally, the conference is held as a 3-day in-person conference, circulating mostly in European cities. COVID-19 forced the conference to go entirely online in 2020 and 2021. Prompted by ongoing COVID uncertainties in 2022, we formulated a vision for a sustainable conference that reduced travel emissions and promoted social justice through improved participant diversity and accessibility for participants with travel constraints. Simultaneously, we envisioned a conference with ample social networking benefits in regional hubs.

This vision informed three design choices. First, instead of the common single-host-single-location approach, we established a partnership between Monash University (Australia), Stellenbosch University (South Africa), and Georgetown University (USA). We expected this to increase the opportunities for participation beyond previous, predominantly European participation, reflected in the conference theme 'Sustainability Transitions in a Global Context'. This also enabled the tuning of conference themes relevant to different geographies, such as the challenges for a just energy transition in Africa.

Second, we adopted a hub model of three online conference days, followed by three non-hybrid, in-person only conference days in Melbourne, Stellenbosch, and Washington DC. We anticipated this would provide opportunities for regionally oriented face-to-face interactions, whilst discouraging international travel and associated carbon emissions.

Third, we sought to accommodate global participation by organizing each of the online conference days during daylight hours in the respective time zones. We wanted to contribute to 'time-zone literacy' (Bastian et al., 2022) and design a conference experience that was less Eurocentric and enabled participation from more diverse geographies. The entire conference ran over the course of one week, starting with the three online conference days hosted by each university via a single online platform,

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followed by three in-person events across three continents. Figure 1 visualizes the conference planning chart.

Our evaluation of the conference attendance details of 347 participants, personal feedback, and feedback from 59 survey respondents provides valuable insights. We learned that compared to previous IST conferences, participation diversified to include more participants outside of Europe (36% in 2022 compared to 8% in 2021) and more participants from low- and middle-income countries (19% in 2022 compared to 3% in 2021). Of the 347 total participants, 150 participants also joined one of the in-person events across Melbourne (75), Stellenbosch (55), and Washington DC (20), which were charged separately. We heard positive feedback from in-person conference participants who welcomed the possibility to (re)activate regional networks and to meet peers without long-distance travel. Of the 59 survey respondents, only 11 traveled by plane, and only four of those were inter-continental flights.

There were also challenges, including the difficulty of accommodating and communicating complex time-zone-related planning and preferences. They can be resolved through regular organizational team meetings and collaborative planning, albeit often outside of normal office hours due to time-zone differences. Second, limited social interaction opportunities online were still an issue, which can be improved through future virtual software advances and new modes to online, convivial conferencing (Bastian et al., 2022). Third, online conferencing does not necessarily reduce participants' registration costs and affordability, and clear communication is critically important when organized with multiple hubs and across time-zones. Some respondents called the conference 'outstanding' and 'by far the best online conference ever organised'. Others said the hybrid model was 'worst of both worlds' but 'appreciated the opportunity to test the model'.

Our approach adds to a growing number of experiments with new modes of academic conferencing in a world that is facing climate and inequality crises. Rather than falling back into pre-pandemic conference habits, we argue conference organizers and global academic communities have responsibility to further experiment with new conferencing models and share lessons to accelerate decarbonization of academic practice, while creating better experiences for interactive and socially just conferencing.

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