



Weak Interactions and Neutrinos (WIN 2021)



Report on WIN2021

Matheus Hostert (UMN & PI)

On behalf of the Local Organizing Committee

Alec Habig
Gregory Pawloski
Marvin Marshak
Matheus Hostert



Weak Interactions and Neutrinos (WIN 2021)



WIN2021 was held online from July 7th to 12th organized by the University of Minnesota

A screenshot of the Indico website for WIN 2021. The header is dark red with the 'WIN 2021' logo and the title 'The 28th International Workshop on Weak Interactions and Neutrinos (WIN2021)'. Below the header, a yellow bar shows the dates '7-12 June 2021' and 'UTC+08:00 (Singapore)'. The main content area has a white background with a sidebar on the left containing a table of contents: Overview, Conference format (Plenary talks, Asynchronous talks, Virtual posters), Scientific Programme, Timetable, Call for Abstracts, My Conference, and My Contributions. The main text area features a banner image of a city skyline and text stating that the workshop has been organized regularly for 40 years and that the 28th edition (WIN2021) will be held entirely online from June 7 to 11, 2021.

[Indico](#)

Topics

1. Neutrino Physics
2. Electroweak Interactions
3. Flavor and Precision Physics
4. Astro-particle Physics and Cosmology

A screenshot of the University of Minnesota website for WIN 2021. The header is yellow with the 'UNIVERSITY OF MINNESOTA' logo and the tagline 'Driven to Discover™'. Below the header, a blue bar contains the 'WIN 2021' logo and the title 'Weak Interactions and Neutrinos 2021' with the dates 'June 7-12, 2021'. The main content area has a white background with a navigation bar containing links: Home, Important Dates, Venue, Participants, Program, Registration, and Contact. Below the navigation bar, a large white box contains the text 'Welcome!' and a paragraph stating that the workshop has been organized regularly for 40 years at various international venues.

[UMN website](#)

We tried out a new format for the online version:

- **Invited plenary talks (live)**
- **Asynchronous talks (pre-recorded)**
 - **Discussion panels (live)**
- **Posters (live on gather.town)**

Instead of parallel talks, we had speakers submit their videos prior to the conference, and held live discussion sessions during the conference.

This allowed to accommodate more timezones without compromising the number of talks and student involvement.

The timetable looked like:

Mon) Plenaries for topic 1 and 2

Tue) shorter plenaries + panels and posters for topic 1

Wed) shorter plenaries + panels and posters for topic 2

Same for topics 3 and 4 on Thu/Wed/Friday.

Astroparticle and Cosmology Theory Overview : Testing the Thermal WIMP Paradigm	Timothy Linden	@
	08:00 - 08:35	
Astroparticle and Cosmology Experiment Overview	Anna Franckowiak	@
	08:35 - 09:10	
What's Happening with the Hubble Tension?	Graeme Addison	@
	09:10 - 09:45	
Break		
	09:45 - 10:00	
Flavor and Precision Physics Theory Overview	Yuval Grossman	@
	10:00 - 10:35	
Flavor and Precision Physics Experiment Overview	Guy Wilkinson	@
	10:35 - 11:10	
Anomalies in B Decay: A Theoretical Overview	Gudrun Hiller	@
	11:10 - 11:45	



Weak Interactions and Neutrinos (WIN 2021)



Main advantages:

-- formatting. Upload procedure already very well documented.

-- gives us reliable statistics

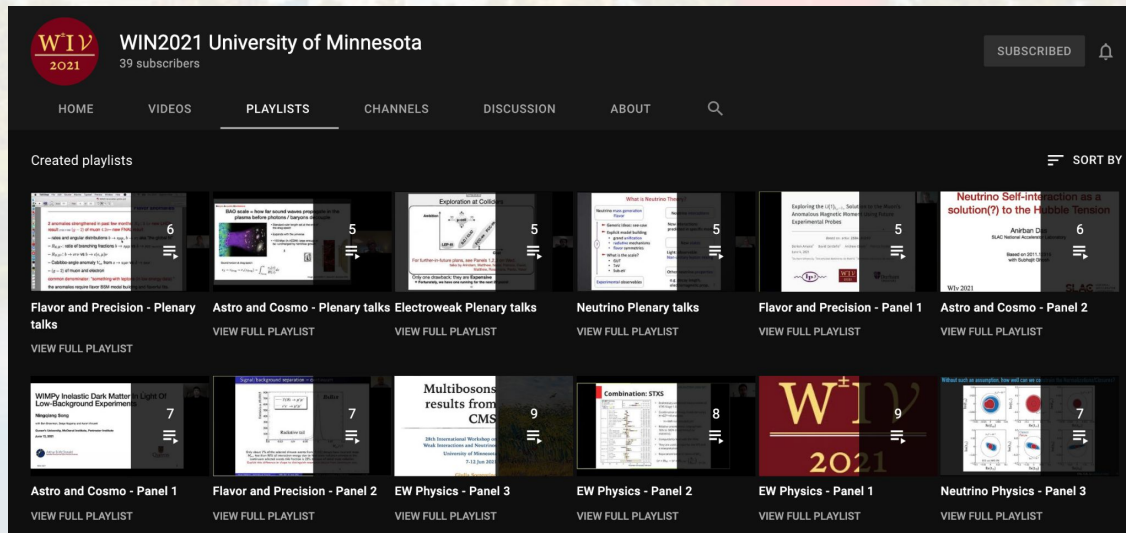
-- collects all video contributions in a single place.

Main issues:

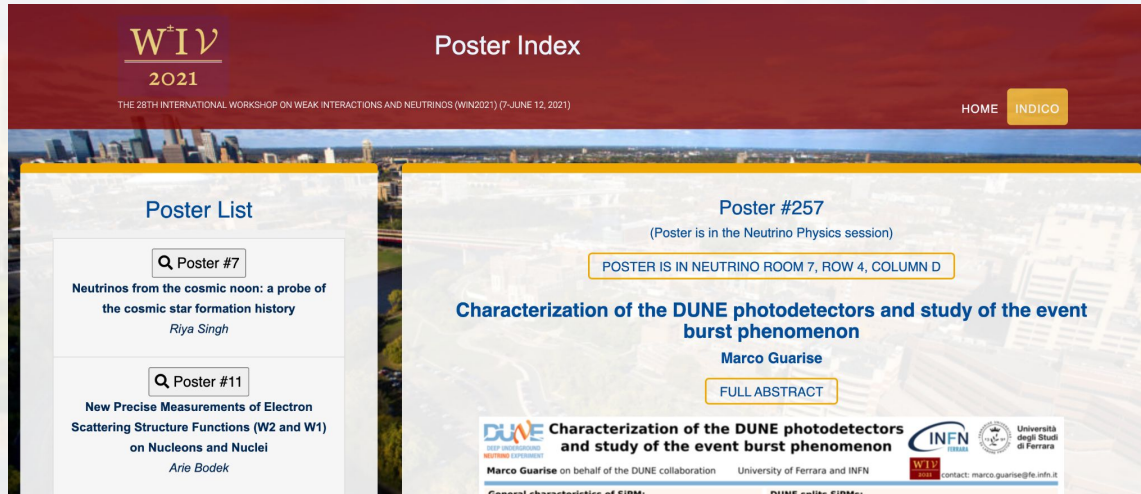
-- blocked in China. Would like to avoid commercial platform as much as possible.

-- several async talks were much longer than requested.

Asked participants to upload to YouTube videos themselves and we appended them to our own playlists.



All posters displayed on our index page (similar to Neutrino 2020):



The screenshot shows the 'Poster Index' page for the W⁺IV 2021 workshop. The header includes the event logo, title, dates (7-12 June 2021), and navigation links for 'HOME' and 'INDICO'. The main content area is divided into two columns. The left column, titled 'Poster List', contains two entries: 'Poster #7' by Riya Singh on cosmic neutrinos and 'Poster #11' by Arie Bodek on electron scattering. The right column features a large preview for 'Poster #257' by Marco Guarise, titled 'Characterization of the DUNE photodetectors and study of the event burst phenomenon'. This preview includes the poster's location (Neutrino Room 7, Row 4, Column D), a 'FULL ABSTRACT' button, and logos for the DUNE, INFN, and University of Ferrara collaborations.

<https://www.soudan.umn.edu/win21/>

Still operational. Record for the future and much easier to browse for individual contributions than Indico.

Weak Interactions and Neutrinos (WIN 2021)



On specific days, we held live virtual poster sessions on Gather.town

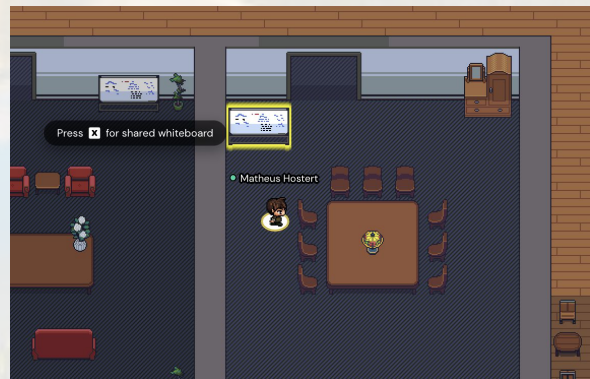
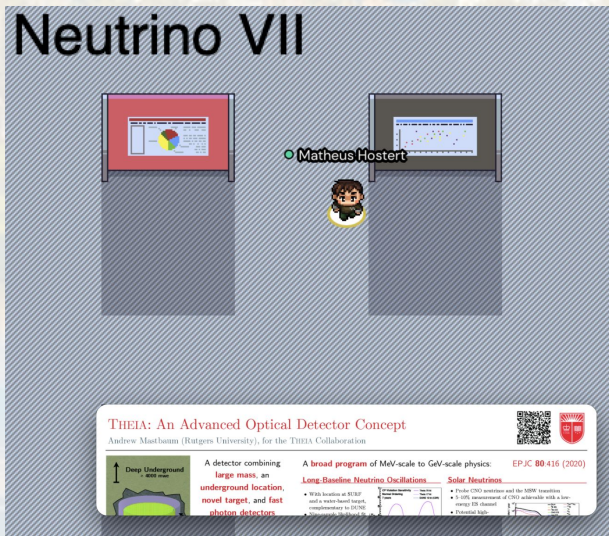
Participants could interact through text, voice and video. Only those around see your camera.

Overall received very positive feedback.

Not expensive both financially and computationally (runs on most people computers.).

Gather.town remained open for the entire week with all posters stands functional. (Still is!) **As close as it gets to social interactions in person.**

<https://gather.town/app/FVpxnkk14zSwXzVy/win2021>





Some numbers in engagement:

Total registrations: 984

Abstracts submitted: 305

Max simultaneous Zoom attendees: 308

Max simultaneous Gather.town users: ~130

Total YouTube views: 2280

Total hours watched: **> 160 h**

Average watch time: **> 3 mins**

Playlist starts/views: **2.0**

Slack members: 300

Twitter followers: >100 → Thanks Eran Moore Rea who ran a very successful twitter campaign. Lots of engagement, retweets and likes.



Some numbers on gender balance:

Attendees:

Self declared male: 542 / 984

Self declared female: 200 / 984

Other/Prefer not to say: 232 / 984

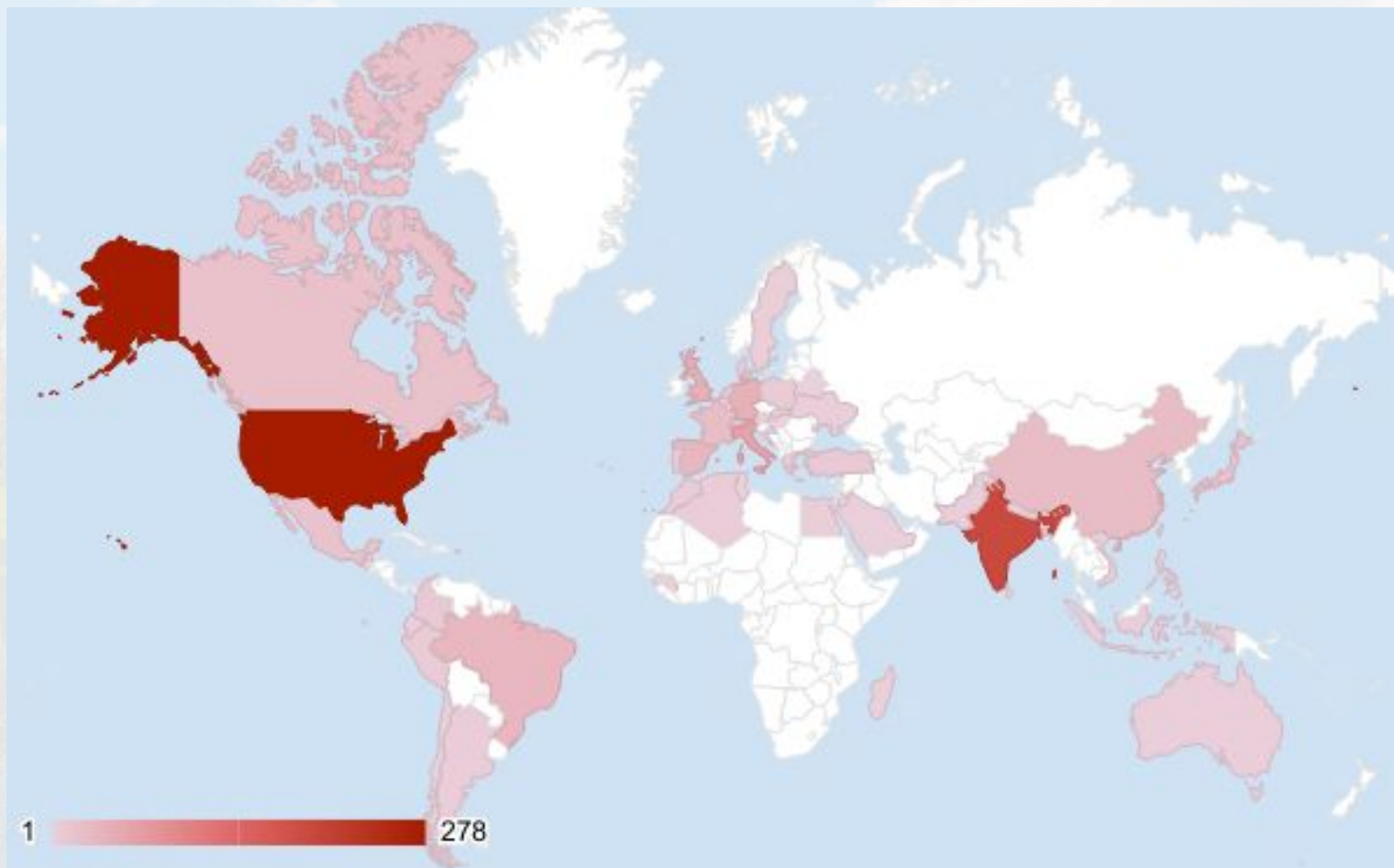
Plenary speakers:

Self declared female: 8 / 21

International advisory committee:

Female (estimate): 16 / 33

Marvin Marshak will have submitted additional numbers in the online report.



Outside USA:
706 / 984

Brazil: 35
Peru: 10
Peru: 8
Argentina: 6
Ecuador: 5
Chile: 2

Egypt: 4
Algeria: 6
Morocco: 6
Guinea: 1

India: 191
China: 27
Japan: 20
Korea: 13
...

Australia: 6

Weak Interactions and Neutrinos (WIN 2021)



Thanks to all conveners who really did the hard work:

Neutrino Physics



- Michael Wurm (Mainz)
- Peter Denton (BNL)

Electroweak Interactions

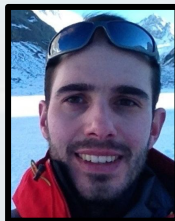


- Ian Lewis (Kansas)
- Yu Nakahama (Nagoya)

Flavor and Precision Physics



- Luca Merlo (Madrid)
- Nathan Jurik (CERN)



Astro-particle Physics and Cosmology

- Shirley Li (Fermilab)
- Alexis Coleiro (APC Paris)
- Kimberly Boddy (Texas)



Weak Interactions and Neutrinos (WIN 2021)



And to all the local volunteers:

Aaron Mislivec

Hajime Muramatsu

Raymond Co

Andrey Shkerin

Dmitrii Torbunov

Richard Diurba

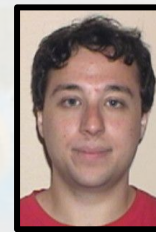
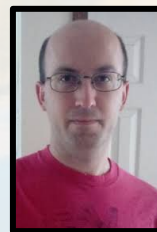
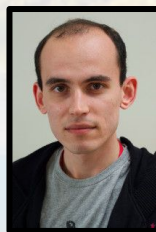
Burke Irwin

Eran Moore Rea

Shaowei Wu

Christopher Hilgenberg

Matthew Strait



Thank you also to all the chairs who really made the panel sessions work.



Weak Interactions and Neutrinos (WIN 2021)



Thank you,

**Looking forward to WIN2023
Zhuhai, Macao, China.**

Currently planned to be in person.
Area very active scientific.