

AES PNW Section

Analog Synths Renaissance Meeting

2025Jan30 Zoom Chatlog

Time shown is a Zoom offset from GMT Jan 31; meeting started about 6pm PST Jan 30.

02:38:45 Elliot Omiya: I fondly remember the San Francisco AES conference in 2005 where Bob Moog was in attendance and prominently revered. It was kind of the analog synth renaissance event.

02:38:58 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "I fondly remember th..." with ❤️

02:40:38 Michael Ashton: Reacted to "I fondly remember th..." with ❤️

02:46:15 Donn Rutkoff: News from San Diego. Our 1929 Fox theater, home to the SD symphony, was totally renovated and looks great, new seats and all, and GREAT acoustics. Paul Scarbrough did the acoust and HGA was the architect firm. Dvorak's New World Symphony was probably the best orchestra concert I've heard. In 70 years on earth.

02:49:11 Donn Rutkoff Oceanside CA near Torrey Pines: Paul Scarbrough's firm is Akustiks

02:49:35 Juliet Wong: Hi, I'm driving right now so will intro myself here. I'm Juliet from Los Angeles, finally formally studying audio, radio & tv at my local junior college, Pasadena City College

02:49:45 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Hi, I'm driving righ..." with ❤️

02:49:50 Elliot Omiya: Reacted to "Hi, I'm driving righ..." with ❤️

02:50:52 Trent Thompson: Reacted to "I fondly remember th..." with ❤️

02:53:01 Israel Noise - Mexico: Hi, I'm way home, I'm Israel a synth lover, field recordist, sound designer and professor for audio and music for film school, also member of AES, and MPSE and I'm in Mexico MX

02:53:21 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Hi, I'm way home, I'..." with ❤️

02:53:33 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "News from San Diego...." with 👍

02:53:37 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Paul Scarbrough's fi..." with 👍

02:55:57 Elliot Omiya: This meeting also got me to re-establish my full membership in the AES. ❤️

02:56:04 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "This meeting also go..." with ❤️

02:57:41 Michael Ashton: Reacted to "This meeting also go..." with ❤️

02:58:35 Julie Mullins: Hi, one more thing I meant to mention: I program and host a weekly radio show on a local independent station, WAIF 88.3FM in Cincinnati (also streams online).

02:58:47 Tom Stiles: I met Bob Moog in 1987 at the AES Conference on Computer Music, held at the Biltmore Hotel in LA. Met Buchla there and had lunch with Wendy Carlos. O brave new world.....

02:59:00 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Hi, one more thing I..." with 🙌

02:59:07 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "I met Bob Moog in 19..." with 🙌

02:59:40 Israel Noise - Mexico: Reacted to "I met Bob Moog in 19..." with ❤️

03:02:25 Elliot Omiya: Reacted to "I met Bob Moog in 19..." with ❤️

03:02:26 Carlos Orellana: Reacted to "Hi, I'm driving righ..." with 🚗

03:02:27 Juliet Wong: Reacted to "I met Bob Moog in 19..." with ❤️

03:04:43 Elliot Omiya: Reacted to "Hi, one more thing I..." with ❤️

03:05:26 Trent Thompson: Reacted to "I met Bob Moog in 19..." with ❤️

03:05:36 Julie Mullins: Reacted to "I met Bob Moog in ..." with 👍

03:09:00 Gary Louie PNW Section secretary: I was at an AES convention once, stumbled into a demo room, and looked at the salesman's name tag: BOB MOOG- Big Briar

03:12:38 Israel Noise - Mexico: Reacted to "I was at an AES conv..." with ❤️

03:16:19 Christopher Downs: Reacted to "I met Bob Moog in 19..." with ❤️

03:16:44 Christopher Downs: Reacted to "Hi, one more thing I..." with 👍

03:16:52 Juliet Wong: Reacted to "I was at an AES conv..." with ❤️

03:18:15 Elliot Omiya: Reacted to "I was at an AES conv..." with ❤️

03:20:01 Dan Mortensen: The picture in my virtual background is a Moog Synth in the studio mentioned in this article, around the time of this party. It may or may not be part of that party and/or belonged to Wendy Carlos.

03:21:18 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "The picture in my vi..." with 👍

03:22:23 Julie Mullins: Reacted to "The picture in my ..." with 👍

03:22:26 Elliot Omiya: Really obscure trivia fact: the original version of this album has Bach sitting down. Later copies had him standing.

03:22:44 Jeremy E. Ann Arbor, MI: Reacted to "Really obscure trivi..." with 👍

03:22:47 Jeremy E. Ann Arbor, MI: Reacted to "The picture in my vi..." with 👍

03:23:07 Christopher Downs: Reacted to "Really obscure trivi..." with 👍

03:23:28 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Really obscure trivi..." with ❤️

03:26:14 Juliet Wong: Reacted to "Really obscure trivi..." with ❤️

03:26:16 Juliet Wong: Reacted to "The picture in my vi..." with 👍

03:32:05 Donn Rutkoff Oceanside CA near Torrey Pines: What synths did Keith Emerson play? He was very deep in synth, and was my fav.in the early 1970s, and still is.

03:33:00 Elliot Omiya: Kurzweil fan here. ❤️

03:33:33 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Replying to "What synths did Keit..."

"Emerson continued to use the Moog Modular on five studio albums dating from 1970 to 1973. By the fifth, Brain Salad Surgery (1973), he had also

adopted the Minimoog and at least two other Moog products; the prototype Apollo polyphonic keyboard and the Lyra monophonic synthesizer."

<https://moogfoundation.org/thom-holmes-keith-emerson-an-appreciation-of-his-moog-musicianship/#:~:text=Emerson%20continued%20to%20use%20the,and%20the%20Lyra%20monophonic%20synthesizer.>

03:33:36 Aureliano "Orly" Pisa: Emerson played mostly large Moog modules and custom stuff

03:34:21 Donn Rutkoff Oceanside CA near Torrey Pines: thanks. that was too easy!

03:34:29 Joe Grisso: E-Mu Systems is fairly conspicuously absent!

03:35:17 Tom Stiles: Fairlight and Synclavier were a whole world in themselves

03:36:42 Elliot Omiya: Kate Bush was a Fairlight aficionado in the 1980's.

03:37:09 Julie Mullins: Transcendent 2000 (kit form?) Maybe late 1970s?

03:37:28 Joe Grisso: E-Mu (Dave Rossum) also helped with the VCO design in the Oberheim SEM, and designed the first digitally scanned polyphonic keyboard - and licensed the technology to Sequential for the Prophet-5!

03:39:00 Elliot Omiya: now you told me something I didn't know, Joy Division using the Transcendent

03:39:55 Julie Mullins: Reacted to "now you told me so..." with 👍

03:40:43 Elliot Omiya: I was a big fan of the music of this era (college radio DJ) and was in the business of knowing this kind of stuff. But you can't know everything, especially in the pre-Internet days.

03:40:43 Jeremy E. Ann Arbor, MI: Frank Zappa - Jazz From Hell is mostly Synclavier I believe

03:40:54 Christopher Downs: Reacted to "Frank Zappa - Jazz F..." with 👍

03:41:12 Julie Mullins: Laurie Anderson also worked with a Synclavier I think?

03:41:24 Julie Mullins: Reacted to "I was a big fan of..." with 👍

03:41:50 Christopher Downs: Reacted to "Laurie Anderson also..." with 👍

03:42:22 Joe Grisso: Funny aside - Wendy Carlos nicknamed her Synergy keyboards the "LSI Philharmonic"

03:43:20 Elliot Omiya: you all are teaching me all this stuff I didn't know. ❤️

03:43:21 Donn Rutkoff Oceanside CA near Torrey Pines: I don't get it. I guess I know too many acronyms

03:44:14 Dan Mortensen: you all are teaching me all this stuff I didn't know. ❤️

03:44:25 Dan Mortensen: That's kind of the point of this...

03:44:26 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "you all are teaching..." with ❤️

03:44:44 Donn Rutkoff Oceanside CA near Torrey Pines: What does LSI stand for?

03:44:45 Juliet Wong: Reacted to "Laurie Anderson also..." with 👍

03:44:47 Juliet Wong: Reacted to "Frank Zappa - Jazz F..." with 👍

03:45:03 Juliet Wong: Reacted to "I was a big fan of t..." with 👍
03:45:06 Juliet Wong: Reacted to "now you told me some..." with 👍
03:45:51 Dan Mortensen: Replying to "That's kind of the p..."

gratifying to know it's working.

03:46:04 Wayne Edwards: LSI = "Large Scale Integration" Meaning there's more transistors than on a small IC like an op-amp.

03:46:24 Israel Noise - Mexico: Alesis andromeda is from the 90s?

03:46:47 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "gratifying to know i..." with ❤️

03:46:59 Joe Grisso: Was Studio Electronics building their Minimoog clones in the 90s?

03:47:15 Elliot Omiya: Reacted to "gratifying to know i..." with ❤️

03:47:47 Jeremy E. Ann Arbor, MI: I remember seeing Joe Zawinul play a prophecy and really loving the sounds he got.

03:48:39 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "I remember seeing Jo..." with 👍

03:50:57 Christopher Puidokas: Korg Microkorg should be mentioned in terms of early-2000 influence

03:51:19 Trent Thompson: Reacted to "Korg Microkorg shoul..." with 👍

03:51:44 Jeremy E. Ann Arbor, MI: Reacted to "Korg Microkorg shoul..." with 👍

03:52:29 Joe Grisso: Keith Barr also wrote a book called "ASIC Design In The Silicon Sandbox" - for anyone looking to design their own mixed-signal ICs or would love to learn about the process.

03:52:58 Juliet Wong: Reacted to "Keith Barr also wrot..." with 👍

03:53:32 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Keith Barr also wrot..." with 👍

03:53:32 Carlos Orellana: Reacted to "Keith Barr also wrot..." with 👍

03:54:23 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Korg Microkorg shoul..." with 👍

03:55:31 Joe Grisso: Access Music? The Virus?

03:55:40 Donn Rutkoff Oceanside CA near Torrey Pines: Can any of these mimic the acoustics of an organ in a church? The decay and reverb in a particular church?

03:56:07 Joe Grisso: Novation V1 Products?

03:57:21 Joe Grisso: OH! Waldorf! Specifically stuff like the Pulse, other hybrid architectures like that.

03:58:23 Israel Noise - Mexico: Yamaha anlx

04:05:18 Christopher Puidokas: Interested in hearing more about the resurgence of synth building blocks on ICs (clones of Curtis, etc.) with companies like ALFA and SSI, etc. and how that re-predicts a wave of inexpensive analog synths going forward

04:06:23 Dan Mortensen: Replying to "Interested in hearin..."

That might be a better question for the panel, when we get to that.

04:06:35 Christopher Puidokas: Reacted to "That might be a bett..." with 👍

04:09:49 Julie Mullins: Replying to "now you told me so..."

That's how I first learned about the Transcendent—in Stephen Morris's book!

04:11:11 Israel Noise - Mexico: Minibrutes and matrixbrute?

04:11:21 Elliot Omiya: analog nostalgia seems to be persistent in waves...

04:11:21 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reading for later... Guy Fletcher talks keyboards with Dire Straits: <https://www.muzines.co.uk/articles/keyboards-with-dire-straits/1651>

04:11:26 Joe Grisso: OOH! Arturia! Yes!

04:12:45 Chris Myring: Dave Rossum UK Section Talk 2022https://youtu.be/WSPFHd1lWoM?si=1dKGX_a8TA3SwuR9Talks about the tie-in with Sequential.

04:15:39 Wayne Edwards: Analog joy - does analog have less latency and less timing variability? makes it feel more "there"?

04:16:22 Dan Mortensen: Reminder that we're going to let the panelists go where they want, and ask questions at the end.

04:16:42 Aureliano "Orly" Pisa: Latency is a good way to put it

04:18:21 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Reminder that we're ..." with 👍

04:23:34 Christopher Puidokas: Hi Trent - for sure!

04:24:08 Israel Noise - Mexico: Cheaper behringer analogue synthesizers let more people have access to a hardware synth

04:24:31 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Cheaper behringer an..." with 👍

04:24:32 Aureliano "Orly" Pisa: Absolutely, and worth discussing.

04:24:38 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Hi Trent - for sure!" with ❤️

04:24:41 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Latency is a good wa..." with 👍

04:24:47 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Absolutely, and wort..." with 👍

04:25:22 Aureliano "Orly" Pisa: That they are making a few originals, but mostly doing a revisit of legendary visit at an affordable price

04:25:57 Elliot Omiya: screens are disassociated from the physical experience

04:26:58 Elliot Omiya: said by a dyed in the wool software guy ...

04:28:26 Aureliano "Orly" Pisa: Well put Elliot.

04:29:28 Julie Mullins: Reacted to "screens are disass..." with 👍

04:29:34 Julie Mullins: Reacted to "said by a dyed in ..." with 😂

04:30:51 Jeremy E. Ann Arbor, MI: Love the grandmother and matriarch!

04:31:07 Israel Noise - Mexico: Reacted to "Love the grandmother..." with ❤️

04:33:38 Carlos Orellana: People might make more modular systems so there may not be a "powerhouse" analog synth anymore

04:35:47 Chris Myring: The Packrat from Keyboard Magazine 2005<https://www.umop.com/art/packrat03.jpg>Note: 2005 price for the 2600, now USD 10,000?

04:36:20 Christopher Puidokas: I think the concept of having limits is important to being creative, especially in current times

04:36:34 Jeremy E. Ann Arbor, MI: Reacted to "The Packrat from Key..." with 😊

04:36:48 Jeremy E. Ann Arbor, MI: Reacted to "I think the concept ... " with ❤️
04:36:57 Joe Grisso: Replying to "The Packrat from Key..."

Korg is actually blowing out their remaining ARP 2600 Mini's on Reverb for \$999.

04:38:02 Juliet Wong: Reacted to "I think the concept ..." with ❤️
04:38:15 Chris Myring: Replying to "The Packrat from Key..."

The high price is for an original seventies ARP.

04:38:38 Juliet Wong: Reacted to "The Packrat from Key..." with 🤔
04:38:54 Joe Grisso: I'm interested in seeing if anyone explores using (abusing) NPUs for DSP pipelines...

04:38:58 Juliet Wong: Reacted to "Love the grandmother..." with ❤️
04:39:10 Elliot Omiya: even in the age of AI and prompts creating everything, there is still a need and room for original creativity.

04:39:36 Julie Mullins: Reacted to "even in the age of..." with 👍
04:39:40 Donn Rutkoff Oceanside CA near Torrey Pines: Tuning the acoustics in a living room is a trick yet to be conquered

04:39:53 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "even in the age of A..." with ❤️

04:39:57 Elliot Omiya: ok, I need an AI for help with that!

04:40:21 Tom Stiles: In the late 80s early 90s there was a big focus (including from Bob Moog) on creativity through non-keyboard controller devices

04:41:08 Carlos Orellana: Reacted to "Tuning the acoustics..." with 👍

04:41:59 Tom Stiles: Thanks for a good rollicking ride through synth history, mystery and the unknown future! I have to modulate to the next thing.....

04:43:18 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Thanks for a good ro..." with 👍

04:44:09 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Thanks for a good ro..." with ❤️

04:44:10 Joe Grisso: Hey, we can stop any time we want!

04:44:18 Jeremy E. Ann Arbor, MI: Reacted to "Hey, we can stop any..." with 🤔

04:44:47 Julie Mullins: Re: the panel's analog/digital topic when they began their chat: Can you speak a bit about hybrid (analog/digital) synth designs? Is that still a thing for the synth world at all? Could there be a sort of "best of both worlds"?

04:44:55 Juliet Wong: Reacted to "even in the age of A..." with ❤️

04:45:04 Jayney Wallick: Reacted to "Thanks for a good ro..." with 👍

04:45:21 Juliet Wong: Reacted to "Thanks for a good ro..." with ❤️

04:51:31 Julie Mullins: Like maybe a digital filter at the end of the analog path? Thanks!

04:53:42 Israel Noise - Mexico: Or resampling analog sounds or granular with analog oscillators

04:54:06 Carlos Orellana: Is a 555 Timer considered an analog oscillator?

04:54:15 Aureliano "Orly" Pisa: Yes, like this which I think is really rad... and pricey

<https://www.makenoisemusic.com/synthesizers-and-controllers/tape-microsound-music-machine/>

04:54:39 Christopher Puidokas: It's that they used for the EDp wasp

04:55:28 Carlos Orellana: So some NAND Gates triggered by RC is also analog?

04:56:28 Carlos Orellana: Hah... that's why I think it's curious

04:56:49 Aureliano "Orly" Pisa: Absolutely, and this is how analog envelopes are sometimes shaped. analog drum machines for example

04:57:15 Carlos Orellana: Reacted to "Absolutely, and this..." with 👍

04:57:42 Matthew Sutton: This is fabulous, sorry I have to go now.

Thanks for a great meeting

04:57:43 Carlos Orellana: Garbage in, garbage out

04:58:40 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Thanks everyone for being here!

04:59:11 Ronaldo Luis Ayala: I have to leave but I thank all of you for making this happen and for letting me listen in!

04:59:22 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "I have to leave but ..." with 👍

04:59:32 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Anytime Ronaldo!

04:59:57 Donn Rutkoff Oceanside CA near Torrey Pines: adios

05:00:10 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "adios" with 🙋

05:00:36 Ara Kazanjian: Is that all he's done? ;) Impressive guy!

05:00:46 Christopher Puidokas: Great talk!

05:00:57 Chris Myring: Breath

controllers:<https://www.matrixsynth.com/search/label/RealtonI> used to have to look after a Variophon. And not forgetting the DX-7 Breath Controller, supplied with the instrument.

05:00:59 Jeremy E. Ann Arbor, MI: It was great!

05:01:06 Ara Kazanjian: Great zoom with great guys!

05:01:12 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Great zoom with grea..." with 🙌

05:01:16 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to

"It was great!" with ❤️

05:01:21 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Breath controllers:

..." with 👍

05:01:25 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to

"Great talk!" with ❤️

05:01:30 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to

"Is that all he's don..." with ❤️

05:02:06 Ara Kazanjian: Trent is a beast!

05:02:26 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Trent is a beast!" with 🙌

05:02:54 Michael Ashton: Reacted to "Great zoom with grea..." with ❤️

05:03:05 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Great zoom with grea..." with ❤️

05:05:03 Carlos Orellana: Love the 160

05:06:30 Jayney Wallick: I wonder if part of that too is what you're used to using, like maybe you have a preference for using what you've

always used, or similar because you already know how to work, vs. digital where you often have to relearn things?

05:06:38 Ara Kazanjian: Is analog generational, or does a younger demographic find it appealing too?

05:07:24 Tyrel Sabin: I think access is a big part of the appeal of digital

05:08:14 Carlos Orellana: A lot lighter too

05:10:29 Ara Kazanjian: Excellent point

05:12:05 Juliet Wong: I think analogue will always hold the respect of coming before digital and most of digital still emulating analogue. From what I can tell with the community college crowd, Gen X and older hugs analogue like a redwood tree still (I went to UC Santa Cruz, apologies if that doesn't translate well 😊). Younger see it like a cool toy among toys

05:12:30 Julie Mullins: Some kids and younger folks are buying records who don't own record players/turntables.

05:13:02 Ara Kazanjian: True that!

05:13:56 Julie Mullins: Reportedly they want to support the artists more directly.

05:13:58 Tyrel Sabin: I think streaming got so big that kids are liking to hold something physical

05:14:19 Juliet Wong: Reacted to "I think streaming go..." with 👍

05:14:23 Juliet Wong: Reacted to "Reportedly they want..." with 👍

05:14:27 Ara Kazanjian: Love that

05:14:34 Israel Noise - Mexico: Reacted to "Reportedly they want..." with 🥰

05:15:39 Carlos Orellana: I have friends in bands that put out cassette tapes (punks here in LA)

05:15:57 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Reportedly they want..." with ❤️

05:16:01 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "I think streaming go..." with 👍

05:16:06 Juliet Wong: Reacted to "I have friends in ba..." with 👍

05:16:08 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "I have friends in ba..." with 👍

05:16:33 Julie Mullins: Replying to "I have friends in ..."

That too. I see that around here when I go to live music.

05:16:48 Juliet Wong: Reacted to "That too. I see that..." with 👍

05:23:51 Jayney Wallick: Reacted to "That too. I see that..." with 👍

05:27:41 Carlos Orellana: Reacted to "That too. I see that..." with 👍

05:28:23 Ara Kazanjian: It's somewhat controversial, but companies are bringing people back into offices too.

05:28:33 Ara Kazanjian: Collaboration!

05:31:23 Jayney Wallick: There simply is no substitute for good acoustics.

05:32:29 Tyrel Sabin: I'm curious if Trent has interacted with the Slate Digital ML-1 mic modeling stuff.

05:39:19 Joe Grisso: There was an interesting technique UA did with their preamps a while back where they would actually have a programmable input impedance so loading a preamp model plugin would set the impedance to more closely match the way the modeled preamp behaves.

05:40:26 Joe Grisso: It would be interesting to see the impact of something like that in the preamp and biasing circuitry in the mic itself, and have the ability to design a capsule to adjust to those differences.

05:40:35 Jeremy E. Ann Arbor, MI: Townsend - now owned by UAD uses a front and rear capsule to improve the off axis response of the models

05:47:09 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Thanks beyond for tonight! I have an early day, going to call it a night. Hope to see you again next time 😊

05:47:18 Tyrel Sabin: Nice to meet you Jess!

05:47:19 Julie Mullins: I need to hop off now as it's late here. This was excellent, very informative—and a nice group! Thanks to the expert panelists and to AES PNW for hosting this meeting!

05:47:23 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "Nice to meet you Jes..." with ❤️

05:47:26 Jess Berg - AES PNW Vice Chair (St. Paul, MN): Reacted to "I need to hop off no..." with ❤️

05:47:36 Julie Mullins: Reacted to "Thanks beyond for ..." with 👍

05:48:24 Juliet Wong: Reacted to "Thanks beyond for to..." with ❤️

05:48:25 Carlos Orellana: Reacted to "I need to hop off no..." with ❤️

05:48:39 Juliet Wong: Reacted to "I need to hop off no..." with ❤️

05:48:59 Juliet Wong: Replying to "Thanks beyond for to..."

Take care, Jess! ❤️

05:50:19 Carlos Orellana: Reacted to "Thanks beyond for to..." with 👍

05:53:54 Jeremy E. Ann Arbor, MI: Thank you so much, really enjoyed hearing you all talk!

05:54:05 Chris Myring: Many thanks to Michael, Trent and Orly. Also to Dan and PNW Section for hosting.

05:54:08 Tyrel Sabin: Thank you guys for your time and answering the questions

05:54:14 Carlos Orellana: Thanks everyone!

05:54:27 Juliet Wong: Thank you so much for this!!

05:55:12 Joe Grisso: This was an awesome presentation and panel. Thanks @Michael Ashton and @Trent Thompson for being on the panel, and pass on my thanks to Orly!

05:56:03 Tyrel Sabin: Good night!