

Bern: Hey ho, Bern is on Adobe Connect. Working on the sound.

Scott Gaudi: We have the Bern contingent!

Bern: Yes, we can hear you.

Shawn Domagal-Goldman: I can hear you, at least, Scott.

Bern: No cheese. Just wine and crisps.

Bern: Attendance here in Bern: Aki Roberge, David Ciardi, Daniel Apai, Nick Cowan, Avi Mandell, Maggie Turnbull, Bill Sparks, Steve Unwin

Peter Plavchan: Peter PLavchan called in from hotel...

Bern: Oh we do have cheese.

Bern: And Mark Clampin

Amy Lo: thanks for the attendees list

Amy Lo: if you're gonna type in chat, would be great for the Bern folks to identify themselves if possible

Shawn Domagal-Goldman: Amy, are you taking notes of the conversation again?

Bern: Unless otherwise stated, the Bern typer is Aki

Amy Lo: yeah, I'm taking notes, and I'll attribute all Bern comments to Aki =)

Shawn Domagal-Goldman: Thanks, Amy!!

Bern: Oh, please don't. ;)

David Bennett: It would be nice to have more details on this COPAG SIG2 "pushback" on HabEx. Who was complaining and what did they say?

Steve Unwin: Scott: This is Steve Unwin. Regarding probes. DO we know what Paul plans to do with probe recommendations?

Bern: More in Bern: Rus Belikov, Eduardo Bendek

1380215539: Scott - can you put the topics of discussion back up ...?

Bern: No takers on the bet

Shawn Domagal-Goldman: That was a decent description of the push-back.

Shawn Domagal-Goldman: A lot of this revolves around the specific numbers in the HabEx architecture example Scott has been using in the slides on the mission.

1380215539: Can we move down the hand-raised list please?

SALLY HEAP: My handwaving icon is frozen. I'd like to comment on 8m vs 12m

1380215539: Scott: can you put the discussion points back up?

1380215539: thanks

David Bennett: Just because you are paranoid doesn't mean that you are wrong.

SALLY HEAP: Could someone raise his/her hand for me?

Tom Greene: The decadal survey never intended WFIRST to be solely - or even mostly - a dark energy mission!

Bern: More than one Bern person wants to speak

David Bennett: Right, Tom, but the dark energy advocates don't see it that way

Tom Greene: Dave, I don't doubt that, but the record shows that dark energy probes went nowhere (think JDEM, SNAP), until dark energy + exoplanet microlensing + GO wide field was all rolled together.

Steve Unwin: SCott: that answers my question about Probes, thanks.

Bern: Aki here: I disagree Sally

Bern: Yes, but David is first

Shawn Domagal-Goldman: I'd like to hear from the Bern contingent on the international participation on this. They're at a meeting designed to help work that sort of thing out. Are there any developments?

Tom Greene: Comment re. representation: I think that we need enough people on an STDT to develop a robust exoplanet program without having a specific quota of people.

Bertrand Mennesson: My main concern regarding LUVOIR is to make sure that exoplanet science is driving the mission design. We can convey this in different ways in the report, through that exact statement and by recommending some minimum fraction of the LUVOIR STDT

Shawn Domagal-Goldman: I'd argue we also need the planetary scientists to do the optimize the science we get from the mission.

SALLY HEAP: To quote from HDST report (p. 47), "HDST's primary goal is to detect and spectroscopically examine dozens of exoEarths in the stars HZs". So we have two teams with the same scientific goal. The difference is how to achieve that.

Karl Stapelfeldt: STDT members always have travel funding paid, do not need to ask for that. Asking for salary would be a departure from past practice

Bern: Need salary

Bern: That's sort of the point

Karl Stapelfeldt: We have analyses showing that exoplanets would need 2.5 years of the LUVOIR mission. If its lifetime is JWST-like (5 years requirement), that's half the mission to exoplanets and thus half the STDT should be exoplanet scientists

SALLY HEAP: Karl, When I was part of the TPF-C study, my salary was paid by TPF-C.

Shawn Domagal-Goldman: It's not just the soft money scientists. I've heard the same concern from University-based scientists that are not "soft money."

Karl Stapelfeldt: The HQ model is that home institutions pay salary support for work on national committees. Works well for people at large institutes, not well for those at small ones.

Amy Lo: Bern is breaking up a little

Karl Stapelfeldt: Exo-S and Exo_C were prohibited from having foreign involvement . Would be nice if new ITAR regime allowed a different policy.

Karl Stapelfeldt: Habex might do wide-field optical imaging , this would be new from space

David Bennett: Karl, WFIRST will probably have one filter in the optical

Eric Smith: Regarding ITAR, we just went through extensive discussions with State Dept and DoD for JWST. It was clear that large optics would NOT be moved off ITAR list. We got the instruments moved over to Commerce EAR.

Lucianne Walkowicz: I agree with Shawn-- explicitly justifying support is smart

SALLY HEAP: Scott: I agree with your point, but I don't think you'll get a transparent cost analysis.

Bern: By the way, we have no A/C here and it's a heat wave in Bern. The view is nice, tho.

Shawn Domagal-Goldman: I agree with Scott! (And by the transitive property, David.)

Shawn Domagal-Goldman: 1. Direct imaging of an earth-sized/like planet in the HZ around a sun-like star 2. Detection of biosignatures in planetary atmospheres 3. Comparative planetology

Shawn Domagal-Goldman: ^ this was what I had in an email from David

Shawn Domagal-Goldman: I agree with Nick. We can wordsmith this.

Shawn Domagal-Goldman: Proposed goal (via Chris Stark), LUVOIR goal might be to constrain abundance of biosignatures.

Shawn Domagal-Goldman: David?

Bern: That's OK. I'm niche.

Shawn Domagal-Goldman: I'm on board.

Shawn Domagal-Goldman: I have Aki Roberge, David Ciardi, and Nick Cowan for that drafting. Am I forgetting someone?

Amy Lo: Chris Stark

Lucianne Walkowicz: Thank you Aki I appreciate that

Amy Lo: I missed it, Kevin who?

Lucianne Walkowicz: I'm juggling LSST writing as well. Kevin France

Amy Lo: thx

Lucianne Walkowicz: Hey Aki, will you drop me & Kevin an email to get the ball rolling when you have a moment? Or I guess you can just tell him he's been "voluntold" in person

Shawn Domagal-Goldman: There have been multiple calls for comparative planetology to be included, for multiple reasons. We'll include this in our draft.

Shawn Domagal-Goldman: I agree with Aki.

Lucianne Walkowicz: +1

Shawn Domagal-Goldman: YES! +1 to Nick's point here.

Shawn Domagal-Goldman: on the exoplanet relevance of UV observations of the host star

Karl Stapelfeldt 2: Don't specify resolution and wavelength coverage, just state UVOIR telescope with spectroscopy sufficient to characterize the habitability of exoplanetary atmospheres

Shawn Domagal-Goldman: we can specify temperature instead of wavelength range here

Shawn Domagal-Goldman: i.e. not cryogenic

Shawn Domagal-Goldman: for LUVOIR

David Bennett: Keep in mind that best mirror coatings for a coronagraph have very poor UV reflectivity. The UV sensitivity might have to be sacrificed to have a high contrast coronagraph

Marshall Perrin: maybe just "at least 2 microns"?

Karl Stapelfeldt 2: I agree with Dave that reconciling UV and internal coronagraphy will a big task for both STDTs

Bern: That's not true about the mirror coatings. See THEIA study.

Shawn Domagal-Goldman: 6.7 is also a natural breakpoint, as Chaz pointed out at the last in-person meeting

Bern: Oops.

Lucianne Walkowicz: Folks I'm going to have to go to a meeting here momentarily (thus going against my prior advice about not leaving the room or someone will assign you something)

Bern: We are outa here! Thanks!

Amy Lo: thanks!