PAMELA HARRIS: The Center for Minorities in the Mathematical Sciences presents Mathematically Uncensored,

ARIS WINGER: where our talk is real and complex, but never discrete.

[Music]

PAMELA HARRIS: Welcome to Mathematically Uncensored, where our

ARIS WINGER: talk is real and complex,

PAMELA HARRIS: but never discreet.

ARIS WINGER: How’s it going?

PAMELA HARRIS: Good. How are you?

ARIS WINGER: Excellent. Excellent. Things are going. We had a good conversation with some people just now on the, My Favorite Theorem.

PAMELA HARRIS: [00:00:48] Can you believe it?

Yes!

PAMELA HARRIS: Does this mean we've made it? Like we got to be on somebody else's podcast? That is amazing.

ARIS WINGER: That was great. It was great. I really had a good time with them, I guess that comes out next month or something. So,

PAMELA HARRIS: yeah. So, so I feel like we have to not talk about our favorite theorems now.

ARIS WINGER: No that's fine. Yeah, no they'll will hear it. Yes.

PAMELA HARRIS: [00:01:11] Yeah. So friends check that out. Like Aris said probably in a month or so. You'll, you'll learn a little bit about our favorite theorems. But, what's up with people recommending the show? I've been hearing that there's a new Twitter handle.

ARIS WINGER: Yeah.

PAMELA HARRIS: You want to tweet at us? They do what?
@MmathUncensored.

ARIS WINGER: [00:01:31] Yes.

PAMELA HARRIS: [00:01:33] We have this, this new Tweeter, Twitter account. I can't talk, I don't know the words, you know, I'm new to the Twitterverse, but yeah. We want to ask people to recommend the show. You know, talk about it, tell us what you think. And also
remember that our podcast is hosted by the Center for Minorities in the Mathematical Sciences. So you can also hit @minoritymath to let them know what you think about the podcast.

ARIS WINGER: Absolutely. Absolutely. And they also, yeah, yeah. The Center is down for whatever, right? Because as we said, from the first episode that we want people to give us our ideas, particularly people of color so that we can create a space that's for y'all. Right. And so, the idea is a wide open about creating anything. Like if you want us to create a space where we're nominating people or a space where you want to write grants or a space where, so in other words, if you were saying, you know what, I wonder if, what would happen if we tried this or should we create this? And think about the Center, because that's a place where it can happen.

PAMELA HARRIS: Yeah, for me, one of the clear things that I've been meeting, and I also need to put my mouth where my money, how does that go? My money where my mouth is, my mouth where my money is. Whichever way that makes sense. You know, we, we've talked at length in the podcast, or maybe I've talked at length about the terrible, you know, state of the publishing world. Any time that we, as people of color, want to put our comments out there, our opinions, our thoughts. And so the one thing I want to start utilizing a lot more is making use of the blog, the Center's blog. And so for our people, you have thoughts, feelings, opinion, something happened. You have some advice. Hit us up. We can publish you as one of our writers or one of our blog ambassadors, if you so will.

ARIS WINGER: I love that.

PAMELA HARRIS: So we're definitely looking for people who want to share some of their experiences being Black and brown in the mathematical sciences. Yeah.

ARIS WINGER: Especially if you, and here's how you know, right. When you're like, you know what, I think I might want to write this and then you get this feeling like, Oh, but I don't think people are going to like it. I don't think, I don't think people are going to respond to it the right way. Then, you should probably think about, oh, well maybe the Center is a place that we can put it, right. Where it can be valued, you know, and just be put up authentically as you wrote it.

PAMELA HARRIS: Yes.

ARIS WINGER: Right. And this is no shade on anybody else, right?
PAMELA HARRIS: We don't need to put shade on anybody else, we know what this shit is like outside of the Center.


PAMELA HARRIS: [00:04:15] Yeah. But anyway, so let's, let's kind of catch up a little bit. So since the last time that we chatted, one of the things that we've, and maybe we've seen a lot of, or I know I have, is this idea of promotion, right? Like self-promotion, you know, promoting the work of other people.

ARIS WINGER: Yes.

PAMELA HARRIS: And I mean, we just saw it, right. Like we got to sit in on My Favorite Theorem podcast. And so that is in some sense, some promotion of the work that we're doing. And so where do you stand on self-promotion?

ARIS WINGER: Yes. So, I mean, so I think that I'm pretty decent with it. I mean, so I think, I guess there are a number of different layers, so I think I'm getting better at it. Right? Cause I think people, cause I think for me, like I don't have, I've yet to get my website going. Like I think I can, there's a lot of open space for what I could be doing. But I think I, I've created like a groundswell. Like people know me, and like they know what I'm about and they know not to invite me to certain things. So like, I'm doing my job there, but I see a tremendous, like, lack of promotion amongst my people.

PAMELA HARRIS: Yeah

ARIS WINGER: Right. And so I, so in other words, I see some incredible, like talented, brilliant people. And too often when I mention them to other people, they're just like, who is that? Right. Yeah. That type of like, who is that? And like, it's just like, yo, you need to be louder. You need to, you know, make more connections. You need to just, yeah, get your webpage up and like, and announce yourself to the world. Right. Because you need to be seen. Right. And so, I've heard from other people and I've had, I had this to myself, this notion of like, well, if I put myself out there, there's some risks there, right.

PAMELA HARRIS: Yeah

ARIS WINGER: What are people are going to think, the haters, all of this stuff. But the cost-benefit analysis is clear. That. Yeah, you need to be, you know, tooting your own horn and making it clear what you can do, because no one is going to advocate for you as much as you advocate for yourself.
PAMELA HARRIS: Ooh. Say that again for the people in the back.

ARIS WINGER: Nobody is going to advocate for you. And part of the reason is because, only you know, what you have gone through, only you can really fully, you know, explain to the world in your words, which are often the best words, you know, what you can do and what you're capable of doing. So

PAMELA HARRIS: So, I love this because one of the things that I wanted us to spend some time on is thinking about how we might leverage the Center to do this kind of work.

ARIS WINGER: Yes.

PAMELA HARRIS: Right? So for example, you know, when we say that, that we want the Center to become this like, dynamic organization that is serving the needs of Black and brown mathematicians for the Mathematical Community at large, like what, what do we need to make sure that the Center then contains? And so, you know, like I mentioned, okay, I find myself a lot of the times having conversations with people. And then it makes me think this, this thing that we're having a conversation about, why is this not written somewhere? And again, so then I focus on, okay, let me get a blog out about this particular experience, get some feedback.

ARIS WINGER: You’re really good at that.

PAMELA HARRIS: I try. I mean, I try, because I realized that there's so many missed opportunities that when we have a conversation, that gets lost. Right. Or it only incorporates the people who are in that conversation. And what I'm cognizant of is that, well, who has access to that conversation? The people that have access to that conversation are my friends. Right. They can hit me up and be like, can, can you jump on the zoom call real quick for 10 minutes, I need a piece of advice on, you know, how to put this together. And then I'm like, yeah, sure, call me up, click on the link. Yes, which is similar to this podcast. Like we started this podcast because we were having these conversations and constantly we were getting people to tell us, I wish somebody would've told me that, or I wish you would tell people about that. And we were like, oh, oh, we didn't realize that there was potentially an impact on the things that we were just having conversations about, very, I don't want to say passively, but just behind the scenes, right?

ARIS WINGER: Right, right.
PAMELA HARRIS: And so I wonder, and you said it very clearly earlier, that maybe what we need in terms of promotion, is like, we need the Center to start organizing things, to like come up with a grant writing session. Like how many times do we have ideas about, oh, you know, there's this idea I have about a program for high school students, or whatever it may be.

ARIS WINGER: Yes

PAMELA HARRIS: And all of a sudden we [00:09:00] know how it works. Like we have great ideas, but sometimes we don't got pockets with the money in em.

ARIS WINGER: That’s right. That’s right. Go ahead.

PAMELA HARRIS: Yeah. And I was going to say like, maybe this is one of those things that if the community says to us, yo, we need you to organize how to write a grant, you know, or we need you to organize, you know, I don't know, something about putting these websites together, that you keep talking about.

ARIS WINGER: Yes. Yes

PAMELA HARRIS: You know, I, so I guess what I'm saying is like my friends, Black and brown folks listening, like tell us what you need. Cause we're going to make it happen, because the Center is basically our community, right.

ARIS WINGER: Right.

PAMELA HARRIS: And so we're trying to figure out like what programming and really, what are the needs of our community and how do we like continue to push forward and advance both as professional mathematicians as educators, but really as a community.

ARIS WINGER: Yes. And I know, look, I know this is hard for us to do because it's like, it's uncomfortable because we don't have this. We don't have people actually asking us, tell us what you need. It's just foreign to us. Right. And so I understand how some people may be out there and just like, wait, what? Right. And so, cause it's hard to think about, let me bring my great ideas to this place and you all will work to try and make them happen? Right. And

PAMELA HARRIS: So let's be clear, try to help you make them happen while also not stealing your idea. Or while also not putting our name on your idea

ARIS WINGER: Or at the bottom
PAMELA HARRIS: Or at the bottom

ARIS WINGER: Yeah, yeah. Yeah. The idea is yours. Right? So, and that's what amplify means. Right? We want to amplify voices. That means we want to take your, YOUR voice and make it louder. That's right. And so, yeah.

PAMELA HARRIS: Yeah. The, the one thing that I was thinking about, you know, we've, we've gotten some love and some feedback on how we can improve the podcast. And one of the things that was very clear to me was, people are listening. But sometimes, and I mean, I, you know, I'm not hard of hearing, but I do recognize that being a English as a Second Language learner, it is hard sometimes for me to process auditory information, especially if it kind of goes by fast. And so like I watch TV with the close caption on there. And there's times where then I hear something, and it doesn't match the wording, and then I'm confused because I'm like, which one is it? Right. And so, so we got some feedback about, you know, possibly adding some transcripts to the podcast. And so that's something that we're actively working on. You know, sometimes things cost a little bit of money, so it might take a little bit of time. But rest assured you know, multiple people asked us to put up some transcripts. And so we're working on that and we'll work to make sure that every podcast we have from the start of the series has a transcript. So please, you know, when we say, we'll do it, we're going to do it. Sometimes, it'll just take us a little bit of time. So, you know, give us, give us that time, but we'll put it together and make sure that it is, you know, what it is that you want, we deliver.

ARIS WINGER: Absolutely ideas, ideas, ideas, let's run with them. Let's get it

PAMELA HARRIS: Yeah. And so here's another one that I've heard down the grapevine. I am terrible at analogies, but I try and try and try. Every time I mess them up. But, okay. So one of the things that I heard that might be of deep need for us to start is nominating committees.

ARIS WINGER: Ahh

PAMELA HARRIS: Right? Okay. And I mean, like for awards from other organizations.

ARIS WINGER: Yes. Yes, yes, yes

PAMELA HARRIS: So how do we make that happen?
ARIS WINGER: [00:12:35] Well, no, I mean, we got to get organized. And let me, let me step back, that, I mean, this has been my, this is why I'm excited about the Center, because you know, when you have, you know, groups of people who aren't feeling like they're, you know, visible or being validated and the discipline, then you got to get organized, right? And yeah, so that means that we got to get people together to solve a problem. And so if, you know, again, if we're not feeling like we're being nominated, then let’s try and, you know, get together and, and group people as nominators. Now, look, that that's a shitty situation, right?

PAMELA HARRIS: Yes

ARIS WINGER: I mean, we live in a context in which we've got to organize so that people will actually bring our names up. Yeah, that, I'm not normalizing that that's okay. But at the same time, we definitely want people nominated because otherwise we would be hypocrites because how many times did we come on here and say that representation is so important.

PAMELA HARRIS: Yeah

ARIS WINGER: Right. And so, yeah, so to see some of us rightfully earn the awards that we deserve and have our Black or brown faces up there for the world to see, right, is discipline changing.

PAMELA HARRIS: Yeah

ARIS WINGER: And so, yeah. So we got to do that. And so, yeah let’s organize around that.

PAMELA HARRIS: Yeah. And for example, the AWM extended their deadline for awards coming up. And I think they're looking for somebody in topology, somebody in algebra, somebody in analysis. Like there's a wide range of awards that are coming up due March 1st.

So, I am the awards committee chair. And so, I cannot sit on any of these committees, but please, my people, I encourage you, nominate each other for these awards. Like they're sitting there waiting for nominations. And so please, please, please, you know, check it out, go on the website. So AWM-math.org. Y'all should Google it just to make sure. You know, that one doesn't roll off the tongue as easily as minoritymath.org. But please check that out. And I think that's one that's coming up soon. There's also the AMS fellows. That's coming up soon. I want to say March 31st, something to this effect. And so there's a wide range of awards that we should be nominating people for
constantly and spreading the wealth. Right, so you know, just, just keep that, keep those deadlines in mind. Cause they're coming up fast.

ARIS WINGER: Yeah, so let’s talk about what's at stake. What's at stake is like life changing, you know, awards, right. I mean, when one of our colleagues, when one of us wins, one of these things, it's forever. It goes on the CV forever. Right. And that it starts to increase, you know, visibility left and, right, right?

PAMELA HARRIS: Yes

ARIS WINGER: So, yeah. So, and by the way, this is another one of these, you know, 5% things. It does not take that much to nominate.

PAMELA HARRIS: That's right.

ARIS WINGER: So let's go ahead. And, you know, this is a little thing that we can all do to uplift ourselves.

PAMELA HARRIS: And I think also the process of like nominating somebody makes you get some visibility yourself, because it might be that you're writing a letter of support for somebody’s nomination, or it might be the you're the person that's kind of doing the instigating, making sure that that nomination packet is getting put together. And so you can play a supportive role by just saying, okay, hello, dear chair of this department where this awesome black mathematician works. Here's an award that you should nominate your faculty for. And in fact, I have person X, Y, and Z, who would support that nomination and write a letter to go along with that. Please let me know when I should expect your letter of nomination.

ARIS WINGER: Yes. I love it.

PAMELA HARRIS: Right? So I think that there's different levels at which we can support each other to get those nominations done. And they don't all need to require, you know, 10 hours of work. Like this could be just emailing the right people and say, Hey, have you thought of person X for this award that I just saw that, you know, this organization is giving out. You should write a letter in support of it, and I'm happy to submit it for everyone.

ARIS WINGER: [00:16:37] Yes. Oh, I love that. I love that. That sounds like just being organized about it, right?

PAMELA HARRIS: Yes.

ARIS WINGER: Yes. Yes, absolutely
PAMELA HARRIS: And, and again, willing to actually do the 5%, right? Like you have to be willing to do that. Yeah. So I think that's one of the ideas that maybe we can start thinking about organizing through the Center, which is like, how do we put together these nomination packets to make sure that they land well, right?

ARIS WINGER: Yes. Yes

PAMELA HARRIS: And also incrementally improve them because. Again, it doesn't mean that because you put a nomination in that person is going to win it, but then it's about incrementing that nomination, improving it and then just committing to submit it until that person wins that award.

ARIS WINGER: That’s right. That’s right.

PAMELA HARRIS: Okay. That's what we need. Don't submit it once and then be like, well, see, I tried. And they didn’t win it so they must just not be good enough. And then you just like, let that die. Nah. From the time that you submitted that to the next cycle, if they didn't get it, trust me that mathematician has done a ton of work that now you can add into that nomination letter that wasn't there before. And now that second nomination is going to be way stronger than the first.

ARIS WINGER: Cause on the other end, nobody knows how many times you put in the nomination. They just know that you won.

PAMELA HARRIS: That’s right.

ARIS WINGER: So it's not going to matter. Yes. Yeah. Just win, right?

PAMELA HARRIS: Yeah. That's right. That is correct. So yeah. Send us any information that you think if there's other awards that maybe I haven't mentioned or that we don't know about, you know, feel free to twet, tweet?

ARIS WINGER: Tweet. Tweet. Tweet is the verb

PAMELA HARRIS: That’s way too hard. Tweet at us @MathUncensored. Let us know so that we can start keeping a list of, of where we should be nominating people for.

ARIS WINGER: Yeah.

PAMELA HARRIS: Okay, so on our agenda, we want to talk a little bit about grants. And tell me a little bit about the first grant you ever were a part of.
ARIS WINGER: Oh my goodness. So it was DEBT-M, and I, so a lot of the grants that I've been on I've been on is like leadership or have had one particular, like role and that is to run professional development as a part of it. Right. So a lot of the grants I've been a part of had been talking about visibility of people of color in the mathematical sciences at some level, whether it's K through 12 or above that. So Debt-M was working with Pittsburgh public school teachers about equity in the math classroom, and a lot of great stuff came out of that. So that was like a springboard for a lot of the other projects I've been on as well. So, yeah, I mean, it was great. I mean, it was, that particular project was wonderful and challenging because it had different people from different organizations who all had different ideas, and really trying to find a place where we can get them all working together. So, but yeah, I mean, there was also this element of, I guess, being a part of when demystified it for me, because like from the outside, I was like, Oh my God, just this grant thing, but then you get in there and it ain't nothing but people.

PAMELA HARRIS: Oh

ARIS WINGER: And I don't mean to, like, I don't mean to like

PAMELA HARRIS: no, no, no, no, no, no, no, I totally get it. Like, it's not like, it feels like a black box. And then you realize that this is work you can do

ARIS WINGER: Oh absolutely, it feels super, super prestigious. Right. I mean Debt-M was like $9 million. Right. And then I get in there and there's some of the most impressive people you could ever come across, but they still people. And they still wrong. And they still make mistakes. And they still, you know.

PAMELA HARRIS: Yes

ARIS WINGER: Yeah. So all of it. So, so that was been the biggest thing. Cause then I jumped in on that, in the, like its third year, but then I seen, I've been on a bunch of other ones, like pre writing. Right. So I've seen people write, I've participated in the writing, in the grant process. I'm still doing that now for one that we're all getting on hopefully. And so like yeah, it is just, yeah. I mean, it's not like, impossible. Right. As a matter of fact, it's superbly accessible because a grant is nothing, but, you know, having an idea and, you know, having the courage to go ahead and say, this idea is good enough for people to pay for.
PAMELA HARRIS: Yeah

ARIS WINGER: Right. And so in particular, these days, you know, the ones I've been on, we've had these ideas and we've said, you know what? This idea helps people. It moves the discipline along and let's go ahead and write on it under the guise of how is it going to have intellectual merit, broader impacts. And is, is it based upon, you know, some good research that says that these are ideas are reasonable?

PAMELA HARRIS: Yeah. So this is really interesting because my experience, my first experience with the grant was very different. So the, the ones that I started with were grants for conferences. So it was like not analyzing anything or doing any research per se. It was more, can we get, you know, $50,000 to put together this conference where underrepresented students are going to show up, they're going to talk about their research in algebra and topology. They're going to build connections and then hopefully build some research collaborations that they'll take with them.

ARIS WINGER: Yeah

PAMELA HARRIS: And so it was very different, but it was really the same idea is what you're saying, right. It's like have this idea. Bring people together to talk about math and build research collaborations. And then you just have to figure out where to ask people for money. And so it seems like we have these kinds of different types of grants. Right? So I think the one that you were mentioning is almost like a, an educational research grant,

ARIS WINGER: Yeah, yeah.

PAMELA HARRIS: which is really big, like you just said, $9 million. And I almost fell out my chair, you know, I'm like, that's like the GDP of some countries, right. Then we're talking about, you know, I've also had like small research grants where I was able to fund like student researchers who were working on mathematics, but then there's also like, at the interface of, you know, management, which you also talked a little bit about and also like industry kinds of grants. And so it seems to me like, you know, we need to get more Black and brown people on these grants. So like, how do we do that?

ARIS WINGER: And by the way, well, what's funny is that when you, when you talk to people who are giving the grants, they want us.

PAMELA HARRIS: Yes. That is true
ARIS WINGER: to apply. Right. And so, yeah, they're desperately wanting Black and brown faces to be there. And so now there's this chasm between people wanting us and us not feeling like we, it's not a place for us to be doing things. Right. And so now we have to be thinking about now when we hear ideas, because I know the incredible ideas are out there.

PAMELA HARRIS: Yeah

ARIS WINGER: Right. And so the question is, okay. Can we take that leap? And again, this is another place where we can bring in the Center to be a place to uplift people's voices and amplify the grant type of possibilities that we have in our minds. Right. And so it's great that we both gave like opposite types of ideas of grants and examples because the grant possibilities do range from the 6,000, like there's one

PAMELA HARRIS: Yeah, yeah, yeah. The Mathematical Association of America

ARIS WINGER: And that’s one you've said you’ve won many times over,

PAMELA HARRIS: Yes, I haven't not gotten it.

ARIS WINGER: Right. You're not trying to hand that one out. You're not trying to tell other people.

PAMELA HARRIS: Oh no, no. People should know. I, I, we share our proposal. So Lathisms, right? So, so Latinos and Hispanics in the mathematical sciences, an organization that I helped co-found and I'm still involved with, we've shared our Tensor Summa proposal, widely, anybody that wants they can have it, right. Because it's not like we own the grant process. You know, we don't own it. I mean, when we were writing that, we asked other people, can we see your Tensor Summa proposal for your event? And people have been very, very kind. And in fact, here's the thing that I didn't learn until very recently, that any NSF proposal that has been funded, you can reach out to the program officer and get that proposal.

ARIS WINGER: Yeah

PAMELA HARRIS: Now, let me just say, they're not going to send you the salary information of people, but they're going to send you the proposal that says here's the description of what we propose to study will be proposed to research, broader impacts, intellectual merit. And so in fact, you can request those, those are public records.
ARIS WINGER: So that's the thing, and I'm glad we're there because, because obviously the original question will be, how do I get started? And when we started doing some where we were starting from like scratch and nothing, the immediate question is, well, can we, we need to see how one of these works, right? And so, and so here we are though, with a hump and I've been worried. I've been thinking about this in general about, you know, being a teacher and really getting over this. Like when I say, oh, I'm available, reach out to me. That is never enough.

PAMELA HARRIS: It's not enough

ARIS WINGER: Never, never, never enough. And like, so when, when we say to people out there in the world, Oh, you can go ahead and reach out to them, they'll give you one. That, they've got to do more than that. Right. I mean, they, that, that often those people are there, so no program, officer's going to come give you something. You do actually have to just write them, write the email and say, can you send me. And you know, I guess, yeah, you write Pamela and say, can you send us the Summa?

PAMELA HARRIS: Yes!

ARIS WINGER: Yeah. That's exactly right. So yeah, it is. You know, just going ahead and saying, can we see this proposal? Because for me in the beginning, I was like, can I do that? Right? Cause it's just this whole thing. And we were talking about this a couple of weeks ago about social capital. Like I never had the social capital to understand that I could go ahead and call and say, can I have, can I see your proposal? I didn't know whether it was nice or whether it was professional. No one ever told me that.

PAMELA HARRIS: Well here's why. But they didn't tell you in either direction is the problem, right. They didn't tell you, you can do this and they didn't tell you that you couldn't do this. And so, so we're living kind of in this like middle ground where there's clear information that is sort of out there that we just don't have access to. And I think that's part of what we need to do as part of the Center, is like bring to light this like secret, hidden menu of information that doesn't just get told to us at the dinner table because our parents are mathematicians and they wrote a $9 million grant.

ARIS WINGER: Right, right, right.

PAMELA HARRIS: We don't know these things, at least I don't, I'm not going to call mom and ask about this. Right. She'll be like, I don't
know mija. What are you talking about? And so that's the first thing, that knowing that this is acceptable standard behavior, when you want to see a grant proposal. Of course, I would encourage you to please first reach out to the principal investigators. So the PI of the grant, you can reach out to them directly and say, I saw on the NSF search engine that you are doing research on X, Y, and Z. I'm wondering if you might share the proposal with me.

ARIS WINGER: Yes

PAMELA HARRIS: And most PIs will share it with you provided they're not actively working on that. Right? So sometimes they're careful because, say for example, a math research proposal there, they might say, I plan to, you know, solve the following three problems. This is what I'm working on. And that's maybe the, one of their PhD student's thesis. And so they might be a little bit cautious about just sharing it with anyone, but again, if they say no, but you really want that proposal, you could reach out to the program officer. But it's kind of navigating that space that can be a little challenging. Now, when it is a proposal about an activity, like what I was saying with the, with the Lathisms Tensor Summa proposal, those are very much like we needed $6,000 to continue to pay the web hosting for the website, right. Or we paid Evelyn Lamb to do some podcasts with some of our featured mathematicians. There was nothing there that was like intellectual merit that we wanted to keep secret.

ARIS WINGER: Right

PAMELA HARRIS: We are happy to share that along, and every time anybody has asked we've shared it. And so if that might help you get started, do reach out to me. I will send you a copy of that.

ARIS WINGER: Yeah. And we, we're just going to end and we're going to just put some stuff up on the Center too. Right. Cause I know there's still some people who are just like, ah,

PAMELA HARRIS: Wait, but we gotta be a little careful because remember we talked about this. That was it, last podcast, the podcast before when all of a sudden we have some people stealing our shit.

ARIS WINGER: No, it has to be stuff that we don't mind having them take. We have to decide. Yeah. We're not. Yeah.

PAMELA HARRIS: Cause listen, I'm not about this whole, like people coming up and asking you for your diversity statement, just so they can copy paste and plagiarize. Yeah, no,
ARIS WINGER: No. I'm with you. I'm with you there. Yeah. So we'll, we'll be careful enough. Yeah.

PAMELA HARRIS: [00:29:16] Yeah. I think, you know, let's stay connected and make sure that we leverage each other's you know, successes to make sure that more of us continue to succeed in terms of getting these grants. I can tell you for a fact that one of the things that I feel like set me apart when I was going up towards tenure, was that I walked into Williams having secured two grants.

ARIS WINGER: Yeah

PAMELA HARRIS: I walked in and the provost emailed me and said, congratulations on your grants, because at the end of the day, certain grants give your institution a lot of money. And so when we talk about career advancement, for people of color in mathematics, grants have to be a huge part of that conversation. Right? And so the reason we're spending time talking about that is exactly because of it

ARIS WINGER: Yeah. Yeah. Yeah, because it's, I mean, it just sets you apart. It can set you apart and it says that you have a whole set of skills outside of just being a mathematician, right. And so you, you came up with an idea that someone said was so good they want to give you thousands of dollars for.

PAMELA HARRIS: Oh my gosh

ARIS WINGER: Period. Yeah, exactly. Exactly. So, yeah, that's what we're talking about.

PAMELA HARRIS: So tell me a little bit about the core grant that you've been involved and, um, I’m tip-toeing, I'm hoping I'll come on board and help out

ARIS WINGER: Look, I'm going back to my broken record. We're trying to change the discipline. And so what does that mean? That means that we are interviewing a few dozens scores of graduate students of color, in their graduate school about their graduate school experience. So from just going into graduate school to just a year or so after finishing graduate school with their PhD, what has been their experience. And so, you know, that, you know, entails, you know, at least 50, 60 interviews of them and really looking at what are some of the common themes that you, that we're looking at that show up, in terms of being successful or what are the problems that arise and so forth. So, you know, that's a venture between Iowa State University and the Educational Development Center and some other players around doing evaluation and so forth. And so, yeah, that's, that's another one of
these projects where you are, you've got a bunch of different people who all have voices, and this is the way it has to be, right. So when you expect to jump on one of these big ones like this, you have to have a lot of voices because that's where the answer is, lots of different perspectives. And so, yeah, that involves lots of meetings and, you know, all sorts of stuff where, you know, you're really thinking about what are the types of questions we have to ask and all of this, right. So it's been great. I mean, it doesn't come without its challenges, but again, it is when you're there and if it's done right, then you just realize it's just people with great ideas, trying to talk it through

PAMELA HARRIS: And so folks can go to minoritymath.org/core that's C O R E for core, to learn a little bit more about that in case

ARIS WINGER: Yeah, we're still interviewing. Yeah. Yeah. If you've got, you know, a student of color who's in graduate school right now, that they are welcome to be interviewed so we can get their story down and it helps the discipline because what we're going to do. And I'm sorry, let me speak for myself. What I'm going to do is come out of this thing and say, look, this is what y'all are doing, right. This is, this is what we heard from the people. And so let us change the discipline, according to the voices of the people that you all say you're trying to serve.

PAMELA HARRIS: Yeah. So, so tell me, how did you get connected or like what, what happened. Like, is this just kind of one of those things where you just happen to be at the right place at the right time with the right folks.

ARIS WINGER: Yeah. No. So this is great because here is the challenge that I have within myself. Right. So there's this balance like, Oh, I'm the shit, right? Because I'm on this grant, right?

PAMELA HARRIS: Yeah. How'd you get to be the shit? Is what I want to know.

ARIS WINGER: Or that balanced between, oh, I'm the best. I'm really good. And then be like, oh, I just really knew him. Right. It's just like, like how, who is it that we can start to think about? You know, how we measure our own talent and ability versus you just knew somebody who just brought you on. Now, of course we know there's a balance, right? And so this is the big life lesson. I think we want to impart today. That is a combination of both things. You know, it's one of these things where it says luck is what happens when preparation meets opportunity.
PAMELA HARRIS: That's right.

ARIS WINGER: Luck is what happens when preparation meets opportunity. What does that mean? That means that you need to get your, a level of competence to a high level, and then you need to find opportunities. Well, how do we find opportunities? That means you have, we don't get to pick when opportunities show up for us. Right. And so, but we can decide to give ourselves the best chance for opportunities to arise by making sure we connect with as many people as possible. In other words, there's some people around in this world that are super talented, but sitting in their basement, not talking to anybody. And so, yes, and so they are not going to be on any grant. They're not going to be, you know, have these opportunities. You have to be skillful in your discipline, but also skillful in making these connections so that when one of your connections comes up with an opportunity and they know you're the most, the foremost person in this area, they gonna call your ass up. You know what I mean? Yeah. Yeah. So I've been struggling with, you know, because it, for me, I'm struggling because there's this like, I want, we want to believe that all you need to do is work hard.

PAMELA HARRIS: Oh, come on. That's a lie. We already know

ARIS WINGER: I know, but I wanna, I wanna hold on to that. Like just work hard. But I don't also want to be like this shit ain't about hard work. If you know the right person, it's done and we have so many examples of that.

PAMELA HARRIS: So many. Too many

ARIS WINGER: It's weird. It's just like, don't know how to do shit. They just know Malcolm and them. Right. But it's like, hopefully we can find somewhere in between where yes, you have connections and yes, you are deeply, deeply in highly competent in your area.

PAMELA HARRIS: Yeah. So that makes me think about the fact that in part, as part of the center, we're trying to build a database. Right. Because especially right now with COVID, I mean, you and I have been talking about the fact that we met August, 2019. Yeah, we saw each other again, a month later at a different workshop. And that's really where we connected. Right. And then started doing work together, you know organized math swagger, you know, like we did all of this stuff leading up to that and leading up to the start of the podcast. But, I'm cognizant that we got to actually meet in person, you know? And so somehow the, those interactions that happen very naturally over a lunch, over coffee, over reaching for the same bag of chips, you know, how do we recreate that? And my thought is like, well, at least we got
to have somewhere centralized that we can go and find new people we haven't met. Because COVID has kept us apart. People need to sign up for the Center's database. I don't know how many folks know it, but there's a database there of mathematicians of color. Please put up your profile because listen, I was just doing this exercise. I'm not kidding. Not kidding at all. I was needing to find Latinos in math that worked in mathematical biology. You know what I do, I reach out to the same folks all the time because, a) they don't disappoint. I was like, if it ain't broken, don't fix it. But at the same time, I was cognizant that I wanted to find some new up and coming people, meaning some advanced graduate students, some early career post-docs, tenure track people. And then I'm like, wait, Where do I find them? And so I go back to the same thing I always do, which is post on social media. And so I'm getting, I'm throwing out a net, but that net is so limited. So we need our people to put their name in this database so I can invite you to programming.

ARIS WINGER: That's right. And so look, no, and let's be clear that first of all, we need to change the name database. We got to figure out a new name for it.

PAMELA HARRIS: I know, it's terrible

ARIS WINGER: So I'm also asking for yeah, but right now, We you go in and then if you're looking for somebody you can put in there, all these different filters, right. You can put in how far along they are. You can put it in the area you can put in. I think you can put it in their race or whatever. It's like, you can look for people that fit a particular type of person that you want to be working with and the database will give it back to you. Right. I mean, and so that works on both ends. So you can go there looking for someone, but you also, you know, if you're a person of color you need to go in and put yourself in there, So I'm in there, Pamela is in there. A bunch of other people were in there so that we can connect with each other and create these connections that we were just talking about

PAMELA HARRIS: Yeah. And so when folks are like, Oh, I can't find diverse speakers in analysis, like go here.

ARIS WINGER: Yes, yes, yes, yes, totally.

PAMELA HARRIS: But you're totally right. That, that means that we need to do the work to make sure that anybody we know who's a person of color can put their information in there and it's, it could be very basic. It could just be name, website, areas that you work in, in mathematics. Yeah. Yeah.
ARIS WINGER: Yes, absolutely. Yeah. Yeah. So we need to, yeah. You need to have people coming there looking, and we need to be in there to be found.

PAMELA HARRIS: Okay. But I want to, I want to come back to this idea that you were saying a little bit ago, which is you want to be competent, right? So you want to end up in a position where you said luck is just. What is it? Preparation meets opportunity. Okay. So let's talk about that because here's one thing that I've been experiencing and I want, and I want to just to have a heart to heart about this. Okay. Yeah. Oh, okay. I'm gearing up because I don't want to say the wrong, the wrong words. I am tired of people who yes, they're very, well-prepared. They put themselves in the right positions, but then they take on so much, they do it all poorly.

ARIS WINGER: Yes, yes, yes, yes.

PAMELA HARRIS: And then they burn themselves the hell out and then they're no good to no one. So how do we find that balance between yes. You know, putting yourself in a situation where you're well-prepared to take something on, but also you, you are taking on the, the amount of work that you actually can deliver. Without all of a sudden making other people pick up the mess.

ARIS WINGER: Oh, no, that's right. No. Yeah. That's, that's a great question. So I definitely feel like I am teetering on one of these people.

PAMELA HARRIS: Oh shit. This was not like a let me watch my words because I'm talking about Aris.

ARIS WINGER: No, no, it's great. No, I know that I know that this is my own self reflection. Yeah, no, no, no, no, no, no. So yeah, no, and I appreciate that. Yeah. So no, that's that's right. And it, part of it, I think is because at least for me is because, you know, when you're opportunities seeking, you know, it's like turning on the faucet. It's like, you've been thirsty. And then the faucet gets turned off, and then like, you're not trying to turn that shit off. You know what I mean? Like that the water is pouring the water and then this notion of like, Oh, I can handle it. Right. So I think burnout comes from just, the burnout is tied to overconfidence. Right, because you just think that you can do what you can do it, you can do this, you can do this, you did those seven other things, what's one more thing. Right. All of that. Right, right, right, right. And then before, you know, it, you're just like, wait, you look back and you see a plate. That is over full. You see food on the floor, you see food, like your plate is crazy right now. Cause
you've got so much on it. And so, yeah, so it really is for me, as I said, from the very first episode that like the, particularly because of COVID and like throwing myself into work, it's been like not paying attention to just being like, no, my plate is too full and learning how to say no. Right. I mean, because yeah, all of it.

PAMELA HARRIS: Yeah. So one of the things that I've been struggling with, and I, and I've talked to other folks about is I think this idea of also the fear of missing out, right?

ARIS WINGER: Yes. Yes. You know they call that FOMO.

PAMELA HARRIS: Yeah FOMO. Yeah. And so I have friends who, you know, I. I have leaned on because I know that they're really good at what they do. Like I know that I can count on them. I know they don't disappoint. I know they answer email, you know, as I expect email to be answered, which I can tell you right now, it is a completely unrealistic expectation. But I email, I mean, my students tell me all the time, they're like, do you sleep? And I'm like, yeah, I sleep. You know, but I answer emails very, very fast, very promptly. And so I have, I have my go-to folks for things. And I've started recognizing something that's been happening, which is I've overburdened them. I've overburden them to the point where they're, they no longer can keep up, but because they also have a day job. Right. And so then, but then I struggle because I'm like, I don't, if I move on to asking somebody else to help with something else, I don't want people to think that it's because I don't value their time or approve, or whatever. But, but, but I do realize that if I go to them, they're just going to say yes, because they don't want to miss out. But then I see that they're burning out because maybe the thing that I had counted on them, you know, five months ago still isn't done.

ARIS WINGER: Yes.

PAMELA HARRIS: And so, so I guess what I'm saying, and this is where I was like trying to thread lightly and I'm just going to stop, is no one knows when you're about to drop all the balls that you're juggling. No one knows until you do it and until it's too late and then you let people down. And for me, that's really challenging because when somebody lets me down, it's really difficult for me to build up that trust again. Because see, I started off with my default is whoever I'm working with, they can be trusted a hundred percent.

ARIS WINGER: Yeah.

PAMELA HARRIS: That's where I start. That's how my meter starts. And maybe it shouldn't, maybe it should be like build up the trust. Okay.
So we can, we can agree. We can argue that, but I start with, if I bring you onto something is because I know you're going to give it a hundred percent until you don't and then I no longer ask you.

ARIS WINGER: Hmm. So @minoritymath, yeah. We're going to write Pamela. Let's help her out.

PAMELA HARRIS: They can't see my face, but I am ashamed

ARIS WINGER: No, no. I'm glad you're saying that. No, I'm glad you got it out there. Yeah, because there might be a middle ground there somewhere, right? I mean, yeah. 100% or zero?

PAMELA HARRIS: That's what I do. That's what I do. So maybe, maybe the problem is it's not other people. The problem is me. Right. And so I, I, I tend to try to let other people. Yeah, I try not to let people down. Oh, that hurts. I can't, this is an uncomfortable place and I want to not talk about it.

ARIS WINGER: Okay. I was about to ask you some questions about it, we don't have to talk about it. It's not like we call it Mathematically Uncensored or anything.

PAMELA HARRIS: No, no please ask. This is going to pay for my therapy session

ARIS WINGER: Because what you let somebody down and then what, what happens?

PAMELA HARRIS: And then I will be forgotten.

ARIS WINGER: Woo. My goodness. Now I have to remind you or tell you for the first time that you can't be forgotten. Like yeah. You, you're already etched in stone. Yeah. I mean, yeah. Forgotten by whom. Yeah. No, you can't be forgotten. Yeah. So you mean dropped you mean

PAMELA HARRIS: like I'm going to disappear into oblivion, you know, like no one's ever gonna invite me to be on a panel. Nobody will care what I have to say. Like,

ARIS WINGER: No, because that's what you would do to other people.

PAMELA HARRIS: Oh, fuck.

ARIS WINGER: Right. So yeah. So you are, you are, you are having this battle with yourself, right? Because yeah, yeah, yeah, yeah, yeah. So, so the people out there are going to let you know that we have a lot more sympathy for you than you would have for yourself. We ready to do it. Hm.
PAMELA HARRIS: But maybe, but that's what I need to have for other people.

ARIS WINGER: Yes

PAMELA HARRIS: Covid has taught me a lot. Right. Because, and I mean, maybe this stems and I don't know. Right. Like I, I'm gonna have to talk to my therapist. For a long time to try to dissect this. But one thing that has been very clear for me as a, as a child, you know, we've, we've talked about, you know, some of our upbringing, but, you know, from the time that I was from like kindergarten to 12th grade, I went to like 10 different schools. And so I was always, I was always the new kid, Aris. I was always the new kid and, you know, the new kid don't make friends. Like I have to make friends fast because they ain't going to last.

ARIS WINGER: Powerful

PAMELA HARRIS: And so I would be forgotten right. The second that I would move it's like, I never existed. You know, it wasn't like I could stay friends with my middle school friends because we were on Facebook or had Snapchat or a cell phone. And so I think I've carried that so much into my work that like, it has, it has shown its ugly head as me working incessantly to never let anybody down so that they don't just throw me aside. That somehow I measure my, the value of my friendship in what I have to offer in the work that I do. And so then I tend to, because I do that and it is extremely unhealthy and I admit to it, then I need to work extra hard to not do that to other people.

ARIS WINGER: Yes. Yes. Yes. Powerful, powerful, powerful, powerful. So yeah, no, what you're modeling for me and for all of us is this deep, you know, introspection and looking into the mirror and making sure that yeah. Our issues don't get imposed onto other people. No, that's powerful. Thank you for sharing that. Oh, wow.

PAMELA HARRIS: You're welcome. That's still hurt. I'm like trying to ignore that we just had this conversation

ARIS WINGER: And I would like to offer it. Maybe it's not hurt, certainly uncomfortable, but I think something in which you're going to be so much better because of it. I don't know if hurt is the right word. It may feel like it though.

PAMELA HARRIS: I think it, it feels. Yeah, I'm not sure I have the right word. I think it feels like something I need to spend more time reflecting on and that, and also acknowledging, and I, and I have a good friend who tells me, you know, I, that I am more than just what
she can get out of me, you know, mathematically speaking or you know, oh, that we throw out this grant and this blog and this fast, and it has been really hard for me to hear her. You know, she tells me that all the time. She's like, why don't you realize that we love you? Whether or not we get this grant. Yeah. Whether or not we get this grant, we write this paper, we write a book, we do this, you know, we become a not-for-profit and I'm just like, But I don't see. Yeah. I mean, I think it's an issue about self-love right. That, like, I only love myself as long as I can accomplish things. And I wonder how much of that is the experience of, of being a minority in a space that is not made for us.

ARIS WINGER: Yeah. Cause it's always, what is it that you have to offer?

PAMELA HARRIS: Offer? Yes right then, like my being my essence, my soul, my person is certainly not enough because it doesn't translate into how many papers, how many grants, you know, we accumulate. And so I think that's the reality of like being Black and brown in these spaces sometime.

ARIS WINGER: Yes. Yes. You are more than your work. Yeah.

PAMELA HARRIS: Yeah. And so, I mean, I'm certainly saying it and I'm working at it, you know, I give talks and I'm like, I'm more than the theorems I prove, but let me show you the theorem I proved, you know? And so it's, it's really. Yeah. And so it leads to burnout. That's really the main thing that I wanted to get at that it leads to burnout because we cannot do it all at the exact same time. And so taking on these opportunities that arise because you're prepared. Right. Doesn't, it can't be enough. Like, there's going to be times where you have to preserve some of the time to make sure that you're resting and reflecting and whether those opportunities are actually the opportunities that you're looking to have. Rather than just somebody needing help with something.

ARIS WINGER: Yes. That's right. No, I mean, I, yeah, my bar, thankfully my bar is going up at some point, you know, I was at a place. It was like, yes, I'll do that. Yes. Yes. Just yes yes yes yes yes. Right. And then it was like, wait, I'm still doing that, but wait.

PAMELA HARRIS: I was about to say, like what have you said no to.

ARIS WINGER: That's right. That's right. That's right. Yeah. Yeah. There've been a couple of things that just haven't fit at all. Right. And this has been like, yeah, but now I can see myself now that I've reached because I feel like I'm at a limit right now where it's just
like, nah, I can't do that. Right. And so, but that comes with just
getting to a place where you're comfortable. Right. Cause I think
that. You know, I, you know, when you're at a place where you're at
zero and you start getting opportunities, you're just not even used to
being full.

PAMELA HARRIS: That's right.

ARIS WINGER: You don't even know what that feels like to be full. So
where you'd be like, nah, I can't do that this week. Yeah. So it's a
process.

PAMELA HARRIS: Yeah. So one of the things that maybe is helpful, and I
don't know if you do this, but do you have someone that you talk to
when you get an opportunity to kind of like a sounding board? Like,
what do you think? Should I say yes to this other thing?

ARIS WINGER: Yeah, no, that's not been my walk at all. I need a
person. So maybe we should have that an opening on the Center for
someone to just talk for Aris to talk to. Yeah, no, it's yeah. It's
yeah, not me. Yeah. So, and that's because of the walk, like, cause I
just have a different walk where I've had to do so much on my own.
That's just been the habit. Right. And so yeah, I have been working on
really thinking about finding another person to be like, you know
what, let me bounce this off of you. Right. Because right now bouncing
off myself and that's, that's called that's an echo chamber, right?
Yeah. Oh, that's just like, yeah, no, that doesn't work.

PAMELA HARRIS: You're like, what should I say? Should I say yes? I'll
say yes.

ARIS WINGER: Yeah. But I do, like when I hear it, other people say,
yeah, I spoke to this person. I hear you and Michael. I hear other
people just like, yeah, I spoke to this person and they gave me some
great advice. I was like, Oh, that sounds great.

PAMELA HARRIS: Yeah. Yeah, no, I think we need to be better at that,
especially because we want to ground what we say yes to on our
professional mission. Right. I talk a lot about, about our
professional missions, and we've also talked about it in the book a
little bit. Because otherwise everything sounds interesting and fun
and worthwhile and worth doing. I don't think anybody comes to you. I
mean, I don't know. Maybe you've had this experience. . This what I'm
saying. I've never had somebody say to me like, Pamela, let me tell
you what I was thinking. Maybe we can work on this and maybe like,
that sounds awful and I'm not going to do it. And I have yet to have
that experience. But the one thing that is clear to me is that there
are times where you can be the person who helps somebody else with their idea, or sometimes you are the person with the idea. And so those are two different skill sets that you have to build, right? Like part of being a leader also means that you need to know when not to lead. And so it makes me think a little bit back to what we were talking about the grants, right? So as a participant in a grant, or as somebody who was involved in a grant, you have a different set of responsibilities, depending on what role you're playing. So you might be the principal investigator. There you get to make decisions. Right. And so maybe you're somebody who's looking more to move into a position to make decisions. And so then you want to look for those kinds of opportunities, or maybe you want to, you know, sign on to be just part of the team. And so maybe you're a co PI or senior personnel, or maybe you're somebody who just wants to participate and be somebody say, for example, for the core grant, you know, you're saying we're interviewing underrepresented minorities in mathematics. So then maybe you want to participate and be interviewed and have your voice in aggregate, you know, de, what is it?

ARIS WINGER: De-identified

PAMELA HARRIS: Thank you. De-identified, but in aggregate you have something to contribute to that study. And so there's something that's really interesting about when somebody comes to you with an opportunity is kind of deciding also the level of commitment that you're able to put into that project. And maybe that also helps, right?

ARIS WINGER: Yes, no, this is a revelation to me. Yeah, absolutely.

PAMELA HARRIS: Yeah. So it's like decide whether it is something that fits and aligns well with what you're trying to do and accomplish, but also the level of commitment. And my thought is, you know, there's a beautiful saying in Spanish, which is cuentas claras, amistades largas. Which translates to clear communication, long friendships.

ARIS WINGER: I love that

PAMELA HARRIS: And cuentas claras has also has another meaning, which is like clear books, you know, when you have a book and you're tallying your money, and then we're just going to be real clear where the dollars go. Then that means also, you know, long friendships. And so, so it has that kind of double meaning. But the thing that I think I haven't done so well, is that part, you know, I get so excited and so wrapped up and like, yes, let's do it. Let's do the work. And then we don't have that communication where it's like, okay, here's how much I can commit every week to the project.
ARIS WINGER: Right.

PAMELA HARRIS: And then you become overtaxed. Because you've never had that discussion with any of the groups you're working with. And so if you don't set that from the get go, you know, I can commit two hours a week to this project on these days. Is that sufficient? If the answer is yes, then you're okay. Then I can do it. Otherwise, if you're like, well, I'll steal time from when I'm eating and when I'm supposed to be going to the gym and when I'm supposed to be spending time with my family, then you're just robbing. Okay. How does the saying go, robbing Peter to pay Paul?

ARIS WINGER: Robbing Peter to pay Paul, I think you're right

PAMELA HARRIS: I got it right!

ARIS WINGER: Yeah. No, that's powerful. That is powerful. So yeah, we should all be keeping that in mind as, you know, opportunities come our way that, yeah, they're all not the same. And you can't give them all the same.

PAMELA HARRIS: Yeah. And here's one warning. Okay. Because I had a really terrible experience with somebody putting me on a grant. So. You have got to ask what your roles are, because once I got asked, Hey, do you want to be listed on this grant? And I was like, oh my gosh, they're going to put me as like a co-PI or something. And I was like, yes. And again, we didn't have this clear communication of what my role would be, and guess what? They didn't put me nowhere that it mattered, but they put my name everywhere. Yes, you get me because then they can count me. They could count me. So I don't get to list that grant on my CV. I don't get to list, you know, I don't get to say, you know, I was a participant because I actually never participated. But if you search on the NSF website, you'll find out what grant that is. That lists me and has, it has never been a benefit to me in any way, but my name appears on it. And so we gotta be careful with folks, man. Yeah.

ARIS WINGER: Well, and also, yeah, but this is this you're helping me because when somebody comes and asks you to do something and they want your name, then you have all the rights to have some conditions, demands and boundaries on how your name is going to be used. Right. And so you're helping me to understand that. And this is again, hard to ask for because we're so used to getting the scraps. Then when somebody comes and asks you, can you help with this? You are well within your rights to say, here are the conditions in which I am going to be assisting you in helping you in coming on. Here's the time that I can devote to this is that satisfactory. This is what is going to
have to be right. That, yeah. It's no, we should. We need to change our orientation to be like, Oh, I'll take your scraps too. Okay. You want me on this thing? Here's the way that it's going to be with my time and my effort.

PAMELA HARRIS: Yeah. And the other thing that I'm thinking about is that most of the time, when you are on a grant, you know, there, there could be some salary benefits. Like you might be able to put in, get a little cash out of the grant for the work that you're doing, but that's not all that you can benefit from, right? Like for example, you get the put on your CV that you're part of this $9 million grant.

ARIS WINGER: Yes, of course

PAMELA HARRIS: You know what I'm saying? But, okay. Maybe there's also different ways and those are opportunities that I feel like I hadn't thought about until we were thinking about, you know, the episode and talking about grants in general, which is there's times where you also get leadership training, right? You might figure out how to put a team together, how to best communicate, what are good practices and making sure that the work that needs to get done gets done in a timely fashion. But, but whatever it is that. You are part of, or that you're responsible for? It has to be mutually beneficial. Right. It can't be just on this grant. You know, I really don't care about any of it, but I guess I'll do it and you hate it, but it's not really actually getting you and propelling you further in your career in the way that you would want. Then I would say that that opportunity actually is detracting from the real opportunities that might help you reach the goals that you've set for yourself. And so keeping, keeping this idea of something being mutually beneficial really needs to be part of the conversation that you're having with yourself or with the person that you bounce ideas off of before you actually commit to doing anything. And I've been bad at that.

ARIS WINGER: Clear communications, long friendships. I just love that

PAMELA HARRIS: Yeah, I like that one too. All right. Should we do our little competing perspective?

ARIS WINGER: Okay. Sure

PAMELA HARRIS: We talked a little bit about this, but yeah. To self promote or to not promote. And so let me maybe ground it in like a very particular way. So. Maybe an award allows for self nominations. Are you going to self-nominate?

ARIS WINGER: You're asking me?
PAMELA HARRIS: Yeah.

ARIS WINGER: I got to think about it. So I, you know, so yeah. That's yeah. So I, I'm trying to envision self nominating, like writing somebody and say, I nominate myself. I've there've been times in which I've wanted to do that. And it's, I've been concerned about, I guess at the time, I just worried about how it looks. Right. I mean, yeah. So like, it feels like, well, can you get somebody to nominate yourself? Why do you have to do it? Right? And so, so that was years ago, but like, I might be at a place where I could do it today, write somebody up and be like, you know, uh, nominate me. It still feels weird. Like I just, yeah. I just, yeah, I still, yeah. So I think, I think that we shouldn't have a problem with it. I just have to get over my, you know, issues with it. Yeah. I mean

PAMELA HARRIS: So here's, here's the internal struggle that I have, and I think is very similar to what you're saying. So maybe it's not so much a competing perspective. But I'm like if I was doing that good of a job, wouldn't somebody notice.

ARIS WINGER: Mm. But we know that too much of our work is going to be overlooked to begin with

PAMELA HARRIS: but maybe that's not what that work is leading to those awards. You know, because, okay, here's what I'm saying. Here's what I'm saying. Okay. So award, you know, there's the, the fellows let's look at the AMS fellows. Okay. The AMS fellows is like, okay, you've made a long standing impact on the discipline and your mathematical, you know, subfield and then maybe also for service to the community or broadening participation, those kinds of things. And so, okay. So maybe that one it's like, all right. I feel like I can check some of those boxes, you know? And so it feels okay, but what about like the ones that are just for research?

ARIS WINGER: Yes.

PAMELA HARRIS: Do I, you know, how do I get to decide whether I've done enough published in the right journals at the right level?

ARIS WINGER: I see. Yes. Yes, yes, yes, no, but so, I mean, but you can still be nominated. Big Bird to nominate themselves for the award. It's not Big Bird's job to decide whether they get it or not. Right. You have the right. But you have the right to nominate, right? So, yeah. So you are already doing the judging before you even nominate. So no, but that's not, that's not when the judging happens, the judging happens after you nominate yourself. Go ahead and nominate yourself. I mean, just go ahead and do it. This is nominated for, so
now you've helped me. You've helped me now. I am going to nominate myself, right. Because it is like, it is some sense of self-advocacy. Right. In other words, like if you, like, if the world just, if you can't find the right people right around you to do the nominating job and you think you have done the right job, then go ahead. I guess you got to do it, right. I mean, yeah. And I get, they were in a field where, you know, more than likely if you have done the work, then people will notice. But that, you know, I've, you know, this is helping me only because I'm so like, self-dependent and like independent that I'm wanting to do so much on my own. Then this just feels like this is just one of those things. Because having to count on somebody else to have to, you know, toot your own horn, I'm not about that either. So you've helped me, I'm out. Yes. Let's nominate ourselves, period. Yeah. And have them say no, because you're going to nominate yourself and show them your package and what you have done. And then, you know, how is that any different from somebody else? Right. I mean, you're still going to show them the great, incredible work you've done. And if you, if they say no, they say no, but they were going to say no, if somebody else nominated you. Right. The question is the question, is that, you know, are they going to now look at yourself, nomination and judge you based on that? Well, no, PAMELA HARRIS: Right

ARIS WINGER: because yeah, I'm not sure, but like, and they might, but, hopefully, they're still looking at what you, what you're bringing and then be like, oh, I can see. Right. Yeah. But I don't think it's going to be that much of a difference. So I am, I am firmly now on the side of self nominate. Some of y'all out there, look out for my name. Cause it's coming.

PAMELA HARRIS: I love it.

ARIS WINGER: Lots of shit I’m not qualified for, you’re still gonna see my name

PAMELA HARRIS: Listen. I mean, there's there's, there's a sentence that I say to some of my friends. I'm like, you know, sometimes you just gotta act and walk around like a mediocre white man. The confidence. Just have the confidence of a mediocre white man. Oh no, I'm getting fired,

ARIS WINGER: You’re getting in trouble

PAMELA HARRIS: Please don't email us. Don’t email us. What I mean by that is that. You know, I am hesitant. I hesitate, you know, I might read a description or I might read, you know, like a job posting. I
might read whatever. And then I look at every, and I dissect every single thing. And I'm like, do I fit this and this and this and this and this and all of them. And if I, if I, if I miss one of them, I just won't apply because I'm like, I'm like, well, I missed it. I didn't actually satisfy all the things that that we're looking for. And the truth is that they were just looking for a maximum, you know, they're going to look at all the people that applied and then maximize all the things that they gave. And so I took myself out of the running because I was like, see, I don't satisfy, you know, condition three and four.

ARIS WINGER: And then you look and see who got it

PAMELA HARRIS: And then you look and see who got it, and you're like, they didn't satisfy three, four, five, six, seven, eight. Out of ten. Right. And so, so I think that's, that's the part that I struggle with, which is exactly what you were saying, that you could be self nominating for something. You were putting your best foot forward for it. You think you might have a chance, but the decision doesn't come from you.

ARIS WINGER: So are you saying other words that we should be self nominating and not self-sabotaging?

PAMELA HARRIS: Yes.

ARIS WINGER: Wait. Yeah, no, yeah. Don't let anyone take you, don't take yourself out of the running. Yeah. How about that

PAMELA HARRIS: Yeah, no, that's really good. So here's what I struggle, which is like super interesting to me. So grants, which are very much a similar type of thing, right? You put together this idea. You're like, look at me, I have experience doing X, Y, and Z. And here's my new idea. Give me $9 million. I have zero problem with that. Zero problem, trying to convince people to give me money.

ARIS WINGER: Ok

PAMELA HARRIS: But when I need to, when I need to say, well, look at me, my teaching is actually pretty good. I'm like, I guess I build community, you know. I downplay all of these things that I do well, and that is absolutely what you just said. It's me self sabotaging. And I don't understand why I don't do it when it's grants. I don't do it when it's like, submit a math paper to like a top journal. Like I have no emotional investment in grants or, or, you know, anything that has to do with like a research publication. But the second that it's
like an accolade, for some reason, awards, I equate with being a good person.

ARIS WINGER: Yes.

PAMELA HARRIS: And I'm like, I'm not a good person. I don't deserve that. And it makes me uncomfortable. And so I don't want to self nominate.

ARIS WINGER: Yes, yes, yes. Yes. Wow. That's powerful. Okay. We'll go. We're going to boycott nominating you so you can just do it yourself just to get you over this.

PAMELA HARRIS: No!

ARIS WINGER: That's a joke. No, no.

PAMELA HARRIS: Okay good. So one of the things that is then really clear to me, and I really like us having this conversation, because I think you're absolutely right. If you're not self promoting yourself, you're sabotaging, that should be the name of the episode. Be self nominating. Right. And so really it's more about, it's not even just like self nominating. It's really about self promotion, right? Like we, we as people of color, we don't have people promoting our work nonstop. In fact, we're like pulled to the side to go deal with other things that are not the things that are amplifying our work, most of the time, invisible labor. And so we need to be promoting our work and the one thing, and we've said it, and I'm going to say it again. And I said it in this episode, right? It's like, can y'all folks be making some websites?

ARIS WINGER: Absolutely.

PAMELA HARRIS: And Aris, I'm looking right at you.

ARIS WINGER: Oh you should be. This is great. You should be. Yeah, no, I definitely need

PAMELA HARRIS: Where's your website?

ARIS WINGER: No. That's a good question. So yeah, so it's a combination of, and this, this is the same thing about applying for [01:08:00] promotion as well, right?

PAMELA HARRIS: Oh hell no. We need to fix that today

ARIS WINGER: Yeah. So it is, I mean, my biggest excuse now is, Oh, I got to take the time to write the portfolio and to make the website.
And we know the answer, we know the response to that. Oh, by the way, we know that's just tied to fear. Let's just get this out of the way.

PAMELA HARRIS: Yeah, it’s a self sabotage

ARIS WINGER: Right. So there's some fear inside of me that I'm still working on about being rejected, all this other stuff. Right. And putting yourself out there, all of it. Right. And so, so for me, right, there's a lot of comfort in getting people emailing me like, oh, we want you to come versus me putting myself in front of the world and say, here I am. Right. Yeah. So it's that type of thing. So yeah, no, I mean, so I've been using the, oh, I don't have time to do it as a way of just masking the fact that yes, no, go ahead and do it and overcome putting yourself out there. That's definitely the case, because then when I get the email, this is already somebody who wants me

PAMELA HARRIS: right.

ARIS WINGER: As opposed to, yeah. And then again, to your point about these internal contradictions, you have, I have no problem coming on this podcast saying a bunch of shit, but somehow I can just make a website.

PAMELA HARRIS: It’s ok. You have 5%. You’re going to have a website in 2 weeks.

ARIS WINGER: That’s more than 5%

PAMELA HARRIS: No, you can start with a simple one that just has your picture and your name.

ARIS WINGER: You're right. You're right. You know what? That's right. That'd be my 5% for the week. You know what? I will do that. And so next week, I mean, next episode, I will say, go to Ariswinger.com and you'll see my face. And like, here's the beginning.

PAMELA HARRIS: This is holding you accountable. Like nobody’s business

ARIS WINGER: That's right. That's right. That's right. On the next Friday, we have a production meeting I'm going to, I'm not going to have it done. I'm like, okay, I gotta get this done over the weekend. And so before the episode,

PAMELA HARRIS: Oh my gosh, whatever lights a fire under your butt to get it done is going to happen
ARIS WINGER: Yeah. Yeah, absolutely. So, yeah, so all my people out there who are also fearful, particularly my graduate students. Who feels like they haven't done anything yet. Right? Like you feel like, so that's when we have to start talking about, yes you have, right? Because you've taught this course, you've done this at your undergrad, whatever it is. Right. You have enough, right. You can talk about what your interests are.

PAMELA HARRIS: That's right

ARIS WINGER: There's all this stuff. The only, in other words, don't let LinkedIn be the thing that does this. Take over your own space and put whatever it is up there. Right? So, and there's some, there's some issue. There are some decent people out there who are still watching, who wants to see you in a more well rounded sense, right? It doesn't only have to be, you know, what you do professionally and mathematically as well.

PAMELA HARRIS: Yeah, that's right. And I should say I've been pushing a lot of my students to make their own websites. And I'm cognizant that they do have things to put on there, they write beautiful expository papers. You know, they, they go give talks at conferences. They attend virtual conferences. There are president of every known organization, you know, on campus, they've started clubs. They started panels. They've attended, you know, workshops on campus. They do tutoring, right? Like they've TA'd for a class. I mean, my undergraduates are so well-rounded in ways that I could have never even anticipated when I was an undergraduate to be that heavily involved. And those are the things that will set them apart when they're trying to go to a graduate program. Right. I want to make sure that when, you know, my student applies to a graduate program in math and somebody on that committee, that's looking at our application decides to Google her. That thing that pops up is the thing she wants to pop up,

ARIS WINGER: of course. Absolutely right

PAMELA HARRIS:So those are things that we need to start working on and we need to do that as early as possible in our career. And, and again, I know it feels like such an insurmountable, you know, jump to like, oh, I got build a website. But you know, there's, there's so many awesome templates already on Google sites that are free. And so, you know, just investing a little bit of time on using one of those and then just populating your picture and, you know, incrementally adding to it. It's so much easier than deciding I'm going to build the most awesome website in the world. Right. You just, in three days it just
needs to exist and then you improve it. But I think that's one of the things that. You know, people of color we need to, we need to be doing this. We need to be putting our website, having a landing page, getting our domain names so that they could search our name.com. And then all of a sudden, you know, that's, that's the landing page for our career, for our trajectory, for our professional accomplishments.

ARIS WINGER: Yeah. In other words we need, because what's happened over the last 20 years has been that the website has become our new way, our new voice to the world. Right. Because otherwise, because we're going to be out there, regardless. Right. If you're doing anything in the discipline, your name's going to be out on a website somewhere. And so it isn't a lot of ways taking control of your own narrative about how you want to present yourself to the world.

PAMELA HARRIS: Yeah, absolutely. So we got to do it. I can't wait to see your website now that I know it’s coming

ARIS WINGER: Now you’re putting more pressure on me. Now I’m not going to do it

PAMELA HARRIS: No, you already said you would. You can’t go back on it

ARIS WINGER: But you put too much pressure on me!

PAMELA HARRIS: No, I just said a picture and your name and email

ARIS WINGER: No you said oh I can’t wait to see it

PAMELA HARRIS: But that’s what I mean, your picture and your email

ARIS WINGER: You’ve seen my picture so many times. My picture’s right next to yours on any

PAMELA HARRIS: I'm about to make this website for you because this website needs to get done done,

ARIS WINGER: But don't do it. You can't do it for me. See?

PAMELA HARRIS: Well, yeah, you got to do it. Okay. All right. All right. Well, I'm going to be on you. You should be. Yeah. So where's the website. Where's the website.

ARIS WINGER: That's right. That's exactly right. Yeah, I'll be on that one

PAMELA HARRIS: [ I'm just going to change my email signature. Dear Aris, how's your website coming? Send it to everyone. Email Dr. Aris Winger at
ARIS WINGER: Oh god

PAMELA HARRIS: Tweet at him. That's right.

ARIS WINGER: That's right. Y'all know. I know I'm going to get some now,

PAMELA HARRIS: Please fam, please fam.

ARIS WINGER: No, don't do that. No, it's going to happen. It is going to happen

PAMELA HARRIS: Good, good. Yeah. I think you, you hit on this idea that part of what is preventing us from doing some of the self promotion is this idea of being perfect and, and struggling with, you know, maybe this idea of like being a model minority. And so what we do instead of really, you know, self-promoting is we try to like minimize what other people will say about us and how they'll criticize us. But the thing that I want to offer, I think to you, given that we were having this conversation, is that, yeah, people are always going to talk, right? Like they're always going to talk and that shouldn't prevent us from like doing the things that we know are going to be beneficial for us. And then I also think about the fact that, that there's going to be times where people are also going to goal post move, they're going to gaslight us, like they're going to do all, all kinds of shit.

That's going to affect us from achieving our own goals and whether they do it intentionally or not, I really don't care anymore. The impact is real, but I think we need to not self sabotage right? By, by using perfectionism as like the excuse by which we don't even try to put out good enough.

ARIS WINGER: Yes, yes, no, no. This is helping me a lot because it's also saying by self sabotaging it's just not allowing me to be me. Yes.

PAMELA HARRIS: Yes. You're self-censoring

ARIS WINGER: That's exactly. It's self censoring. Absolutely right. Yeah. Yeah. So in terms of like, Having this website and say, look, look world here I am. And this is who I am. Right. That's not happening.

PAMELA HARRIS: Yeah. And so my question is now, all right. So we know that for you, this is kind of manifesting itself in like not putting the website out right. Or possibly like not for me, not self nominating for shit. You know what I mean? Like, so it's definitely
manifesting itself in these, in these ways, but like, how is it manifesting also for other people of color in mathematics?

ARIS WINGER: Oh, of course. Right. Because then you may not, who knows what new ideas we want to offer, but we think in terms of what, in terms of mathematics itself, or when you're sitting in with your, you know, research group, you know, people are talking about stuff and you're like, Oh, well, why don't we go in this direction? Right. And you may not feel like you're going to get shot down if that happens. Right. I think this happens across the board, right. Or when you consistently see what gets counted as a contribution. And just like, I don't know if my contribution is going to get counted at the same way, if it's going to be looked down upon.

PAMELA HARRIS: Yeah. So that's really interesting. So even, yeah, because I'm thinking about like, what about students of color in mathematics? You know, maybe taking like multivariable calculus, like maybe they won't even share that they think there's an error in something that was put out as a solution, you know, because they're like, well, maybe there's something that I'm not seeing

ARIS WINGER: Oh I've gone through many, a class and an error has propagated for 25 minutes in a problem I was covering. And then I finally find it. And I look back at those 30 damn people in the class who watched me with this error for 25 minutes. And I'm like, where were y'all? And it was like, well, I thought we were wrong.

PAMELA HARRIS: Yeah

ARIS WINGER: They just thought that they weren't. Right. So let's be clear. I didn't create a space in which they just didn't, you know, they, they didn't feel comfortable enough to just correct me immediately. So that's on me because I'm the adult, I'm the teacher let's be clear about that. But at the same time, it's like, you know, I, I believed them as well that because I didn't create a space for them to even be wrong about that I might be wrong.

PAMELA HARRIS: Right.

ARIS WINGER: So, so then now they look at me miss a minus sign, and then they just watched me write page line after line after line. Yeah. And then they don't say anything because they don't have, they don't feel like they have the power of voice to say such a thing? Yeah.

PAMELA HARRIS: So I'm thinking about that space. And then I'm also thinking about maybe like undergraduate seniors who are thinking about going to graduate school and then they might not even apply, you know,
and it had students in that situation and I'm like, like the question shouldn't be, you know, should I apply? It's like, do you want to go to graduate school? That's should be the question. Like, do you want to go to graduate school? Do you have in your future dreams and goals and aspirations to have a PhD in mathematics? If the answer is yes Then let's think about what school would be the right phase based on what it is that you want to do and the kind of environment that you need to thrive in. But like, I wonder if this reflects itself, you know, this, this like perfectionism self-sabotage type of thing is showing up that you just don't apply to graduate programs. And I'm guilty of that. I did that. I applied to one PhD program. That's it. And I was like, well, you know, I need to stay home cause I'm having a baby. And so like, I just, I can't go anywhere else. Like other people would have supported me going somewhere else too, you know? And so, or even like applying for jobs, you know, like when I was graduating and had my PhD, I was in a pretty good situation, but like, I didn't apply to any research post-docs cause I was like, me? Little old me? Who went to community college?

ARIS WINGER: Well, that's what we're talking about. Yeah, that's right.

PAMELA HARRIS: That's what we talk about. I don't get one of these NSF postdocs, I don't to go to, uh, you know, you see something for a post doc. I'm not good enough for that.

ARIS WINGER: Right. So, no, but what you've helped us, I want to be, I want to zero in on this, because you said it. You were saying that we should, we should be saying that, oh, is this something I want to do instead of saying, am I worthy of doing it? Right. So let's just take, let's replace am I worthy of doing this with, is this something I want to do, right? Yes, because it's, it's about you and whether you, you know, what you want to do right. More than whether you're worthy to do it, because after all like that, that, that question in itself has no meaning, because that means that you're giving judgment to somebody else over how worthy you are, and no one can judge that.

PAMELA HARRIS: That's it. That's absolutely right. I feel like we, we had a good therapy session. We did, that's helped me so much.

ARIS WINGER: I feel like, I have a lot of work. To turn the 5% to 35%.

PAMELA HARRIS: Good, good. It's additive at this point. All right. So we have some, some stuff to spotlight. So Dr. Juan Meza, is, uh, sharing some information about broadening participation workshops. And so these are NSF run workshops that help young mathematicians learn how to write some grants. So if that's some interest, please search on
that. So broadening participation workshops, NSF is your keywords there.

ARIS WINGER: Yes. And if you're, again, from what we said earlier, if you're down in the, write a grant or have some other idea, come to the Center. We'll hear it. We'll figure some stuff out. We'll make it happen.

PAMELA HARRIS: Yeah, absolutely. I mean, part of, part of the goal with the Center is also to like put teams of people together and so let's help each other advance. Right. And if that involves any grant writing, please let us know.

ARIS WINGER: Yeah.

PAMELA HARRIS: Okay. Five percent.

ARIS WINGER: Yeah. I'm still working. Yeah. So I had my 5% last year getting the ombudsperson. And so she's doing a great job. She already heard from somebody.

PAMELA HARRIS: That's really good!

ARIS WINGER: Yes. I know. Yeah. So, yeah, so this was great because she said, I heard from somebody about you and I was like, this is amazing. And oh shit, what did they say? Right. So this is someone I didn't like, I didn't respond to that email. Their email got lost in the shuffle and I hadn't responded to them in a significant, in a reasonable amount of time. So, yeah. Yeah. So I've been thinking about, and so I don't know who that is though. And so I've been scouring my email, and I think I might just send something out to all of my classes and just say, look, I'm working on this. I apologize. I'm trying to get better. And by the way, when I first brought this up, to my classes that I was doing this, they were like, wait, are you in trouble? And I was like, no, no, no, no, no, I'm not in trouble.

PAMELA HARRIS: Oh no

ARIS WINGER: I'm just trying and make sure that there are checks and balances for your own freedom in my classroom. And like, they just couldn't believe it. Right. They just thought that I would only do something like this if I was in trouble and had to do it. Right. And so they just could not believe that I was trying to do this for their own benefit.

PAMELA HARRIS: Yeah, cause now they're like, he about to get fired.
ARIS WINGER: They were! That's right. I was like, nope, no problems. I'm just trying to just keep myself in check for y'all, you know. So that's been great. So, um, I'm going, it's probably spend this week really thinking about, you know, making sure that, you know, things don't get lost in the shuffle and really how do I communicate to whoever that person is out there uniformly that yeah, I I'm doing the best I can. I'm going to do better

PAMELA HARRIS: Yeah. Okay. Love it. I think that's wonderful. So mine was because I've been thinking a lot about these awards. I am actively nominating somebody for an award. So, yeah, so that's my 5%. I did all the emailing, organization and I said, you know, you, you are who should be getting nominated for this award. Here's what I need from you, cause I couldn't figure it out on your website. I just straight up told them like this wasn't a surprise. I was just like, here's what I need from you. I'm going to make this happen. Who should I reach out to at your institution that would be like an excellent person to advocate for you, you know? And I'll put all the pieces together and get it going. And it was, it was 5%. I want to say it wasn't 20, it wasn't 30, it was 5%. And so my advice and, you know, so, so this is interesting there's times where we talk about 5% and people are like, well, but that's your 5%, right? What do I do? What could be my 5%? Go nominate someone for an award. Yeah. I want to challenge everyone to start their 5%. This time, it's episode eight, you know, we've talked about 5% from all for a long time now on this podcast. And I want to hear from our listeners, what has been your 5% change, and we should be doing this weekly. What have you done? 5% incremental change. Become a better educator.

ARIS WINGER: Tag us on Twitter. Here's my 5% put an image up, whatever it is with as an email, I love that. I love that love that

PAMELA HARRIS: We start this and we really just, it needs to catch like wildfire and we're going to make change in the math community. And so. That's right. And so, you know, that's just one piece of advice. If you're struggling recently to think about what 5% change you might make, I challenge you to nominate a Black or brown mathematician for one of the many, many awards that national organizations, um, have available.

ARIS WINGER: I love it. I love it. Announcements?.

PAMELA HARRIS: Sign up for stuff on the Center.

ARIS WINGER: As always
PAMELA HARRIS: Sign up for our blog, check out our podcast as always, and share it with your friends and your math family and then

ARIS WINGER: New Twitter account, @MathUncensored

PAMELA HARRIS: Right. So please tag us and, you know, feel free to quote us on. It always feels really weird, like, I said that? But yeah, you can feel free to, feel free to, if anything resonates with you and you want to share it out. Feel free to do so. Absolutely. And as we said, you know, be on the lookout, we're going to have all of the episodes transcribed over the next month or so. So if you would like the transcriptions, check that out, but check us out at minoritymath.org/mathematicallyuncensored.

ARIS WINGER: Wow. We good?

PAMELA HARRIS: We are good friend.

ARIS WINGER: Excellent. Thank you again, as always. See you in a couple of weeks

PAMELA HARRIS: See ya in a couple of weeks.

ARIS WINGER: You've been listening to Mathematically Uncensored, where our talk is real and complex,

PAMELA HARRIS: but never discrete!

ARIS WINGER: Bye everybody.

PAMELA HARRIS: Bye!

[Music]