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]

ARIS WINGER: Welcome to Mathematically Uncensored where our talk is real and complex,

PAMELA HARRIS: but never discrete!

ARIS WINGER: Yo what's up

PAMELA HARRIS: Episode 13!

ARIS WINGER: 13. Is this going to be an unlucky episode?

PAMELA HARRIS: Yes

ARIS WINGER: For who

PAMELA HARRIS: Oh, it's about to go down

ARIS WINGER: Yeah, we're going to be taking, well, we've been having some issues with like the emails in the mail bag. Like they've been going to some weird folder that we haven't been seeing.

PAMELA HARRIS: Yeah. And so we apologize about that, please, please, if you listen and you sent us some emails, um, there was some weird thing happening, uh, in the backend. And so,

ARIS WINGER: Yeah

PAMELA HARRIS: but we were here with some mail bag! And, but let's do our quick check-in. Aris, how are you?

ARIS WINGER: You know, I have to appreciate that we do start with the, how are you because we're in a discipline that does not start with the "how are yous" in our classrooms and our spaces and just trying to get to it. So I really appreciate that. I'm doing pretty well. I mean, it's the nearing the end of the semester. I'm putting ends in quotes.

PAMELA HARRIS: I see you

ARIS WINGER: Before the summer starts running off fast, but like, yeah. So really trying to finish stuff up. And I'm making sure that I don't make the same mistake I made at the end of last semester. If you go to last semester's episode about end of semester, "Grades In, Semester Over," I now have a keen eye for my students who are

languishing. And I'm ready. I shouldn't say this in public, but I'm ready to turn in forms, late grade forms. I'm ready for it. So nobody's going to come to me and say they didn't have a chance, I got my incomplete. But ready to go.

PAMELA HARRIS: Excellent

ARIS WINGER: Yes, yes, yes, yes. So, yeah, so I'm, I'm pretty excited about that. So, yeah. Yeah. So I, so my, I'm just in the frame of like, classes are over last, next couple of weeks. I'm sorry to say that to somebody who is going for a while longer. You, right? You're going for a while longer.

PAMELA HARRIS: Yes!

ARIS WINGER: But yeah. We're going to be done. And so, yeah. I mean, I'm excited about that.

PAMELA HARRIS: That's wonderful.

ARIS WINGER: How are you doing?

PAMELA HARRIS: You picked up, you picked up on the word. I was going to use, the languishing. So you too read this New York Times article, my friend.

ARIS WINGER: No

PAMELA HARRIS: You didn't read this?

ARIS WINGER: No, I just happen to have a big vocabulary.

PAMELA HARRIS: Oh shit. No judgment. Cause this word was totally new to me. So there's this really wonderful New York's Times article. And I was just talking to some friends over the weekend, because we hosted a Discrete Math Days conference at Williams, virtually of course, over the weekend. And so we, we started out, you know, our conference with just kind of chit chat, like, how are you? And I was like, Oh, I read this word it's it describes what I'm feeling. And like, we had to do this like whole searching for New York Times recent articles to find what the hell the word was. And it was languishing. And it was described as like the middle child of emotions where you kind of like are just here.

ARIS WINGER: Yes

PAMELA HARRIS: But like there's no real joy. There's, you know, you're just kinda like making it work. And I was like, that's, that was the

word that was missing from my vocabulary a few weeks ago where I was like,

ARIS WINGER: Yes! Yes, yes

PAMELA HARRIS: I hit this wall and I'm burning out, but it's not real burnout. It's just that the things that would normally give me so much joy, just feel, ugh. You know, it's like, ugh, I gotta do this.

ARIS WINGER: I was literally about to ask like where's the joy?

PAMELA HARRIS: Yeah. And so that, that hit me hard. And I appreciate that you use that word cause I, I couldn't remember what the word was!

ARIS WINGER: Every, I mean, at this point, you know, everyone's just trying to finish. Everyone's just trying to check the boxes.

PAMELA HARRIS: Yes

ARIS WINGER: Everybody is. Yeah, yeah. So, I mean, it's like, it's, it's no longer. So I always in my practice, you know, have to try to attend to the joy of mathematics itself as the most beautiful subject in the history of people. And the fact that I'm in the system, that's like, you better give a grade, you better give a number to somebody's performance. You better turn this in, you better. Right? And so this job piece and like trying to find the balance and the question for me, I guess becomes, can't I find joy in the end of the year?

PAMELA HARRIS: You have to, right, because the end of the year also signals new beginnings

ARIS WINGER: Yes

PAMELA HARRIS: And there's something really beautiful about a new beginning, and extending grace. And I think that's where you can find joy, right? That you're extending grace to your students in a time where they're working extremely hard. I really don't default to the belief that people are just being lazy right now

ARIS WINGER: Oh no

PAMELA HARRIS: Because, because getting up and putting jeans on is hard! When I could just be in my shorts all day, right. In my PJ's all day. And so I think there is some sense of joy in extending grace. And I think this is, isn't this like scientifically proven, right.

ARIS WINGER: That definitely is true

PAMELA HARRIS: When they say where you're like, when you volunteer, people that volunteer, people that are kind, you know, like you live longer.

ARIS WINGER: Altruistic, yeah

PAMELA HARRIS: Yeah. And so I think that's maybe where we focus on finding joy in the fact that we can extend grace, that we can think about new beginnings, right? Like people are finally able to get their vaccines, at least in Mass, like we finally just moved to the 16 and up category. And so, so we're, we're getting closer to finding that joy again, where we can like run up and hug each other.

ARIS WINGER: That's right. Absolutely. Yeah. No, that's helpful. That's helpful. I will find joy in that. That's good.

PAMELA HARRIS: You have to, you have to, I'm not going to let you not find it. You have to find that

ARIS WINGER: that. Yeah. Yeah, but I've been, so it's been so long. My head's been down like finish, finish, finish, finish, finish. And like, that's not a joyful process for me in the past, but now, maybe if I say no, here's some places where joy lives, and to really be there long enough to appreciate it.

PAMELA HARRIS: Yeah, for sure. Yeah. Well, let's see. So I want to make sure that people know that they should be recommending the show. You know, tweet at us, post about the show, if there's something.

ARIS WINGER: We respond!

PAMELA HARRIS: Oh yeah, for sure. So you want to hit us up at, @MathUncensored or @MinorityMath, you can hit me up @DPEHarris or Aris @ArisWinger.

ARIS WINGER: Yes

PAMELA HARRIS: And then let's, let's get into the mailbag because like we said,

ARIS WINGER: Let's go

PAMELA HARRIS: We, we miss some of the emails and this one, actually, we didn't miss. I, I got an, uh, a Facebook message. I also reply to those if, if you use that platform. So Allison listened to the last podcast and she emailed, or she messaged me, and she said that she appreciated that we talked about how sometimes you don't invite someone for something, because you default to thinking that they're

busy. That they have so much going on that they're just going to say no. And then I, you know, in the show I said like, don't take opportunities away from me. Like, let me be the one that decides that I can't do something. Like don't default to that.

ARIS WINGER: Absolutely

PAMELA HARRIS: And so I love that she said, thank you for that. Because she was thinking of a particular person to invite for a speaking gig. And they initially thought, hey, no, maybe that person's real busy. And then they listened to the show and they thought, nope, let me let that person tell me that they're too busy. And I don't know how that ended. I don't know if the person that they thought was too busy was too busy. But really the message is like, as, as people of color, we do get tapped for a lot. Right. I mean A LOT, but the truth is that we like feeling valued. At least I'll speak for myself

ARIS WINGER: I was going to say, it feels good to be asked! You and me both

PAMELA HARRIS: Yeah. And so do not hesitate to reach out and invite folks, including Aris. And I write, and I love it when somebody invites us to do something and then they're like, y'all replied! And we're like, we're not that big. Like we're not over here being, ignoring emails.

ARIS WINGER: I don't think I'm ever going to get that, too big. And I'm now I'm on the record.

PAMELA HARRIS: I hope you get too big and you have a secretary just start answering your emails, sir.

ARIS WINGER: But I'm never going to ignore. It's never going to be ignored.

PAMELA HARRIS: Oh yeah, no. That's not happening at all. And then we also had another set of listeners. So Vilma Mesa at the University of Michigan reached out and told us that they have a listening group!

ARIS WINGER: What up!

PAMELA HARRIS: Of the podcast!

ARIS WINGER: Well, that is fantastic. Post that on Twitter.

PAMELA HARRIS: Yeah! Yes. Let us know. So just total shout out to the math ed research group over at Michigan, University of Michigan.

ARIS WINGER: So they're doing big stuff over there.

PAMELA HARRIS: Yeah. Thanks for, thanks for the support and listening. Okay. Topic number one. Can we insert the round one bells here? Like "ding ding ding ding ding."

ARIS WINGER: that was good enough.

PAMELA HARRIS: Oh, I mean, I try, I try. Don't make me make my own sound effects because, now I got to tell you now I got to tell you. So I, for a very long time, I would make the same sound effect for everything. And you know what my sound effect was. It was [whip noise].

ARIS WINGER: Oh, really?

PAMELA HARRIS: Okay. So tell me what that sounds to you.

ARIS WINGER: That's a whip

PAMELA HARRIS: I did not know that was a whip.

ARIS WINGER: What did you think it was?

PAMELA HARRIS: I think that was, I don't know what I thought it was. I thought it was like a laser.

ARIS WINGER: Ok

PAMELA HARRIS: Like a crash or something. I did not know

ARIS WINGER: mu@MinorityMath, and send us the email and see what sound that is. Do that sound one more time. That's right. That's right. Okay. It was, that is a whip for days.

PAMELA HARRIS: Stop laughing! It was [whip noise].

ARIS WINGER: That is a whip for days

PAMELA HARRIS: I made that noise at a math conference. One it's almost like advancing a slide. Cause I was like, now get ready for the laser show or something like this. And then I was like, [whip noise]. And everyone in the audience laughed and I didn't get it! I was like that was not supposed to be funny

ARIS WINGER: That was great.

PAMELA HARRIS: But my bells were ok? The "ding ding ding."

ARIS WINGER: Yes, that was ok. That was great.

PAMELA HARRIS: Okay. Okay. All right

ARIS WINGER: So we're talking about leadership.

PAMELA HARRIS: Leadership!

ARIS WINGER: Yes. Yes, yes. And this is right along with our topics. Right. We were talking about teamwork, collaboration, now leadership. And yeah. So where are the leaders? Right. And so it's one of these things where, we're looking out in the world and we're just like, you know, so it feels like, you know, I came into the mathematical community in a lot of sense, just going to conferences and so forth. And then once you get a part of a community, there start to be issues, right? And so every community has issues. And you know, and even though I'm super critical of the mathematical community, I love the mathematical community. That's part of the reason why I'm critical of it.

PAMELA HARRIS: That's right

ARIS WINGER: If I didn't I love it, I would be doing something else. And so when these issues come up, that plague the community. At some point, you have to be like, okay, let's organize, let's do something to change it. But eventually, and it may be because of the Western influence we have, we got to look to somebody and say, are you leading the way? Somebody has got to lead the way on this. Somebody has got to be the voice, somebody has got to push. And so I've been thinking about leadership in that sense that, you know, when I look and see these issues, it's like. And particularly because we, you know, you and I in particular have been super critical. We know now, I guess we shouldn't say it out loud, but I'll say it that I now come after deans and presidents.

PAMELA HARRIS: Oh yeah

ARIS WINGER: Hard.

PAMELA HARRIS: Hard

ARIS WINGER: Yeah. Because you know, for that reason, because it's the leaders that are going to do the things that other people don't have the power to, or have the courage to. And so, yeah. So I'm glad this episode, in addition to the mailbag is about leadership because we have to start asking the questions: who are the leaders? What does it take to become a leader? Who are our future leaders? All of these things are important because these are the people that, although we would like the community to be able to, you know, uplift and, and set the narrative, we do elect people. We do select people. People are selected. So, so to speak for us and we needed those people to be

doing the right things, being courageous and going against the grain, sometimes.

PAMELA HARRIS: I like that word, it's about courage. And that's the thing that I find most often missing when we have discussions about who is leading in the mathematical community. Because we really understand that leadership doesn't have to just be scientific, right.

ARIS WINGER: Yeah. Right.

PAMELA HARRIS: And I think a lot of the times the default is that those that lead mathematics are those that are pushing the mathematics forward and okay, that's fine. But those are also the same people who end up winning the awards, the accolades, all of those things. That doesn't mean that they also can lead. Change for a community so that everyone can practice mathematics equitably. And so that's the part that I have a lot of trouble with that you, you can be in community and designate particular people as leaders, but what does that actually look like? Is that the people that are publishing the most mathematic papers is that the people that are actually making space for other people to push mathematics forward, like what do we actually envision when we talk about leadership and I, and I want us to push, I want us to push to expand that definition, that it cannot always be the people who are pushing scientific discovery as the leaders in mathematics. Because a lot of the times they tend to end up being some of the most toxic people!

ARIS WINGER: That's right. This is great. No, go ahead.

PAMELA HARRIS: Yeah. They ended up getting, you know, like, like I said, all the accolades and then they sometimes misbehave and they do some shitty, shitty things and then no one calls them out on it. Why? Because they're too big for their own britches.

ARIS WINGER: Yes, absolutely. No, this is great. And so let's just be clear. We're talking about just because you're a full professor doesn't mean you're a leader, right? That's what we're saying. Just because you put out the big paper doesn't mean you're a true leader. That means that you're good at your discipline. And by the way that we had this problem in a lot of different ways that mathematics, where someone who displays an expertise in the subject being gets all these other things for free. We, we, we have people who do well in, in, you know, publishing tons of papers. And then we give them math classes to teach as somehow they are related. And they are not because you can publish all the papers you want and can't teach. Yeah, right in the same way. So, so we, we just give people skills based upon their ability to write these papers. So for the same reason, this is what I

heard when you were talking that, you know, this doesn't mean that you have leadership skills just because you can publish papers a year. Right. And so then you're asking for a diversity of leadership, because those people may be able to lead in the discipline specifically on how to write a paper, how to run a research program. That's fantastic. But what we're asking for in a lot of ways is we need multiple leaders across different boards in order for this discipline to move forward in the right direction.

PAMELA HARRIS: That's right. And I think the key thing here is that I feel like I've witnessed so many failed leadership attempts. In the distinct areas or axes that you're pointing out, that it's not just like push the scientific discovery that then it makes me question this, this thing that you opened up with, which is who are, who is leaning.

ARIS WINGER: Yes, yes. And why. Right. And how so that's right. And so, I mean, and I think it is, there's lots of reasons, but related to what we just said, it's tied to the fact that this person excelled in this one lane and now, yeah. So in other words, what would it look like if you had. And associate professor, or you had someone whose research program was not at the highest level, but they knew how to lead. Right. They knew how to, they knew how to inspire. They had strong leadership skills necessary, but they only got a couple of papers right now. Let me just say, I just said that, and that feels uncomfortable to me because I've just been programmed that if you're going to lead the AMS, if you're going to lead the MAA, if you're going to lead Nam, then you've got to have this many papers. Why is that right? W why is that? That, that needs to be the case. Right? And maybe it doesn't, but it just feels like there's this association between the two. So there's still that right. There's still people are leading because they've established themselves. As preeminent mathematicians. And I get that right. Because someone who's going to represent a preeminent math organization should be a preeminent mathematician, by the way, we have to call that into question what we think preeminent means. Yes. To be clear about that. Right. And so, um, so there's certainly a part of that. And then of course, we're talking about white supremacy. Let's be clear about that too. That when you look at, when you look at these organizations, white, white, white, white, white, white, white, right, right. So there was something about representation that we also have to interrogate there as well. Right. So, yeah. Yeah.

PAMELA HARRIS: No, so, so yeah, I feel like you've slapped me a little there because I'm trying to think at what point that I also drank that Kool-Aid where I spent, you know, my pre-tenure years really focusing

on publishing. I mean, I became a machine. I was like, how does one. Publish a paper. Okay. It does this, it takes X, Y, and Z. Okay. Maximize along that axis. But simultaneously I also am at an institution who highly values teaching. And so I was like, how do you become an award-winning educator? Okay. This is how you do that. Right. And then maximize along that axis while also trying to figure out like, how, how do I build a community in which we all feel empowered to lead in which we all feel like our voices are heard, that if we unite, we are better than if we are individuals. Right. And so, so I've struggled a lot with trying to find the balance. But the one thing I can say about the maximizing along the research axis is that I think no one took me seriously when I said anything about equity and what it's like to be a woman of color in the mathematical sciences until all of a sudden my CV and my publication list became outrageous.

ARIS WINGER: Yes.

PAMELA HARRIS: Let me say that again, because that shit hurts. Like was I somehow less worthy of the, of sharing the experiences that I was actually having in these spaces, because I didn't have double-digit publications? Right. And I still suffer from that. So, so much so that when somebody introduces me, the first thing I say to them to say to other people is to tell them that I have over 50 research publications. And I say that, and I say, you have to say this. Because, then you follow it up with, oh, her and Dr. Aris Winger wrote this book about advocating for students of color. And I'm like, you're not going to hear anything. I say, unless you first like laser beam, [whip noise] over 50 publications. And so, I do drink that Kool-Aid right. Like that I, that my voice was worthless as a leader, unless the CV followed appropriately.

ARIS WINGER: Yes, yes, yes, yes, no, that's powerful. And so, so, so yeah, we're, we're obsessed with the publishing as a way of getting value in our, in our discipline. That's powerful.

PAMELA HARRIS: Here's the other thing that I think about in terms of, you know, when I, when I think about the leaders of, of organizations, the leaders in mathematics, man, there's a lot of times where they fail us. And I think I see their failures in terms of, you know, sometimes the leaders are clueless to how to best support their constituents.

ARIS WINGER: Yes

PAMELA HARRIS: And I find that to be a topic that gets discussed in every single situation where I sit on a board or in part of a group or a council committee, whatever, whatever it is, I end up having to say

this constantly. You know, somebody will say, oh, well person X brought up a problem. I don't know how to fix it. Let's just ask them how to fix it. And I'm like, no. See, as a leader, you can't continue to look to your constituency to solve the problems that they didn't create. Like if somebody comes to you. Just like, just like a teaching analogy, right? Like a student comes to you and they say, prof, I can't solve this homework problem. I have this problem because of it. Right. And then you're going to be like, oh, go away, figure it out. No! And so I'm struggling a lot with how do we get beyond that? Like these people that consider themselves a leader in the mathematical community, and we know who they are. I'm not even going to say names, you know, if they're listening to this and this feels like I'm talking to you, I am talking.

ARIS WINGER: That's right. That's right. We can forward it to them.

PAMELA HARRIS: Yeah. Oh, Oh. I love how we're moving from passive-aggressive to aggressive-aggressive. But yeah. So, so how do we, like, when does a leader become a leader? And a good leader at that so that they can become somebody who problem solves rather than just like looks for other people.

ARIS WINGER: Yeah, no. Yeah. And I know this is good, cause I mean, you and I have talked about this a lot and it's that there is this I'm trying to rectify what you just said with getting the voice of the people, being informed by the voice of the people. Right. And so what is the balance between going to the people and saying, what's your problem, right. And saying, let me hear what you think the problem is. Right. I mean, because we do these equity audits for departments and what do we do? We go, and we hear the voice of the people before we come back and we start doing stuff. Right. So it's like, we do need to hear the people. Right. But in a way that isn't burdensome for them

PAMELA HARRIS: Absolutely. That's right. Yes. Okay. That's great. I appreciate that. Yeah.

ARIS WINGER: Yeah. But so, because it's one of these things for me, leadership leadership has to be in the trenches. Right. Like you have like, I'm tired of leaders being told that this is happening and they're just like, Oh, okay, let me assign person A, B or C to go deal with that. Right? Yeah. You call them up and say, we have this issue. Well, I've got such and such to deal with that, but let them write this. And nobody's saying that you have to be down there every single day because you're a leader, you got other responsibilities, but a leader should never be so detached from the people that they serve. Right. And so, again, we're not talking about you being a supervisor,

it's about you being a servant. Servant over supervisor. Every single day. And so that's one of my main criticisms of when leadership has failed us. And then the other thing is just a complete lack of courage. We say it all the time about comfort that, I mean, how many deans or presidents over the last month have we just said, you know what? You've got to do better than this critically because you know, you can come into this new position, this particularly the new people I've been calling some new people out. They get into this position and then there's like, let me just let, let me just keep the ship the way it is. And then we're good. And then we won't rock the boat and yes, you might have two or three complaints, but we'll just, you know, we'll handle those and then we'll just keep, let the ship go. What we've been trying to say over the last 13 episodes, including this one is that if you you'll be lucky, if you hear two, but those two, for those two that you hear, there are many, many more incidents of pain and suffering that now you as a leader, are responsible for

PAMELA HARRIS: But maybe this has to go back to the why, why do people end up becoming leaders in the first place? Right. Because what you're pointing out is that if the default is that you're becoming a leader because you want to serve people, then that's very natural to hear what people have to say to be in the trenches as you put it. And to really like, figure out what the problems are so that you can try to fix them. But maybe that's not why people go into leadership in math. Maybe

ARIS WINGER: Oh it's status. Let's get it.

PAMELA HARRIS: I mean, cause it feels nice to be president of things. Right. And it feels nice to have your face on magazines and in articles online.

ARIS WINGER: Yeah, yeah. And moving up. Yeah. Yeah, no, I've always been fascinated by the politics of mathematics. That like people are competing and fighting and trying to do better than somebody else and get more notoriety and like it's, it's fascinating. And I shouldn't be so surprised being born out of, you know, finishing two digit multiplications faster than somebody else at the board, you know, in fourth grade or whatever, and really loving that. Right. And this is just in some sense, some extension of that, someone's trying to find the result before somebody else. You were just talking to me about this, right. You were racing, right. So there's some element, sure. That, you know, so this, let me get there faster than somebody else, but then it extends to a place where let me just be this person with notoriety, just for notoriety's sake. Right. For my own ego

PAMELA HARRIS: But math is full of ego! So like, it totally makes sense. It makes sense that people would seek leadership positions, not necessarily for the betterment of the community at large, but for their own individual benefit.

ARIS WINGER: Well, this is something that we have to call into question. I think that, I think I'm glad you brought this up because we have, and it's been true that math success in mathematics is tied to ego. Yeah. And so, no, that's a big no to that. Right. We've got to somehow interrogate that. And in some sense, we know what that means. That means when ego shows up, we can call it out and say, this is a math space and that doesn't have anything to do with ego. It sounds like your ego is showing up here. And I thought we were in the math space. Right. It's that type of thing. So, yeah. Yeah. So are you saying we got some prima donnas.

PAMELA HARRIS: Oh yeah. I'll send you some Twitter feeds.

ARIS WINGER: People are talking to themselves, but let's yeah.

PAMELA HARRIS: Let's, let's think a little bit about this. I mean, I'll say it. What about the Math Alliance? I know I'm going to step aside here to hear your comments, but

ARIS WINGER: We got something from the mailbag. Yes. Yes. So let me tell you about this, this question that we got. Leave out whatever you want to leave out from the mailbag, but this is not like, this is not like I was asleep and woke up. It's like, you know what, let me just say something, right? This is from the mailbag.

PAMELA HARRIS: Yes, yes. Yes. So mailbag question. Rebecca Garcia asked us that she knows, she's heard that, you know, maybe within our math minority community, there's some programs such as the Math Alliance, which, you know, they, they tend to do some good for our community. And I don't think this was just about the Math Alliance, but maybe they've also done some not good things. And so one of the things that people start wondering is like, what do we do when organizations screw up, but also do good? Like, how do we even engage this

ARIS WINGER: No, that's that's right. That's a great question. And so first thing I want to do is I want to honor the fact that this, again, I know that I'm full disclosure, you're on one of the committees, there you're a leader in that space. Right. And so, but as, as I've said, time and time again, that critical love, you know, doesn't escape anybody. Right. And so, yeah, and that includes me, right.

PAMELA HARRIS: Me too!

ARIS WINGER: So I know at some point we're all going to get our, our time and thankfully, so for that critical love, for sure. And so let me start by saying that yet. So this is a complex question as it, as we might expect it to be right. I mean, in particular, the Alliance that's just started has done an incredible job of changing the lives of young people for the better and connecting people, you know, young people to mentors that will show them the way through this discipline. We started this show talking about that. This is what we wanted to do, get people of color, a pathway forward. And what we think is the greatest discipline in the world. And for years, and years and years, the Math Alliance has done that. AND. Right. They have a deep, deep, I have a deep, deep criticism that in the space of trying to find this visibility, we are still being led by people who are not representative of the people we're trying to serve. Right. I mean it is the case. Yeah. I mean, it is the case. And by the way nobody's being paid.

PAMELA HARRIS: Oh yeah, no, there's no pay. You know, this is, this is a volunteer job, like many others.

ARIS WINGER: Yes. And so, and I, and I get the, and there's, there's a problem in the discipline about this that you and I have to get to, that we have figured out in terms of the projects that we've been working on. And that I think that the Alliance and other organizations are taking advantage of that we as mathematicians, brilliant people, some of the most brilliant people in the world are putting forth our time and effort and being paid nothing. And so the optics, Oh, my goodness are terrible. The optics are terrible when you have, you know, white men running an organization, trying to serve people of color. And people of color are working as mentors and nobody's being paid anything. And that the one event that they may have [00:30:00] that, you know, it takes over the calendar, and rightfully so when people come in and, you know, interact with people, pay thousands of dollars to get to this place.

PAMELA HARRIS: Yes.

ARIS WINGER: And then none of the money's coming to the people who are actually working in making this happen, that's deeply, deeply problematic. And again, I say that's critical love. Okay. So, so then we have to do both, right. We have to uplift an organization that is doing that and call it into question at the same time that we need a black woman leading the Alliance.

PAMELA HARRIS: Yeah!

ARIS WINGER: We need Pamela Harris leading the Alliance.

PAMELA HARRIS: No!

ARIS WINGER: That's right. Yeah. I mean, come on now. Like, I mean, because for, and for how long for how long will this reign continue? And I mean, reign. Right. Because, because if you, because again, if we know that there's money somewhere, right, and you can go ahead and show me the budget and say that, oh, we max out the zero. So no, we can't pay anybody. I have criticism of anybody who's going to let people work and pay them nothing. Right. Because as I said, last week, I come from a people who spent centuries doing that. And by the way, I'm talking about 25 cent. You know, when I'm upset, I don't even put the S on the end. Right? Yeah. Give me \$3. Give me anything for taking the time I have to spend hours to talk to a young person. And again, the other issue is that. Please do not, you know, act like my joy in helping another person is going to be enough. Right? I mean, because you're taking advantage of the joy and love I have for helping a young person move in this discipline, right. To pay me nothing. Yeah. I mean, come on. Anything, anything, anything, anything. So, and so, so that's my Alliance spiel, and I got more because, you know, Phil Kutzko, I got some deep problems with him, but I I'll go somewhere else. So it's not just the Alliance. It is, you know, all of these organizations please think about, you know, paying your people, just pay your people. Yeah. I mean, and so first of all, mathematicians, we have found with our collaborative podcast with Sade, we are deeply underpaid. I mean, because we know we are deeply underpaid, so I'm calling for a movement. To ask for more money. What does that mean? That means you need to take that 1.5, whatever you get. 1.5 x, 1.25 x. And I've had you, how many times have you told me, Aris, you need to charge more? Yeah.

PAMELA HARRIS: All the time. Every time.

ARIS WINGER: Every single time. Every single time. Why? Because yeah. It's like, yeah. When I go into my departments and departments, what happens when. Resources come to your department and we don't know what to do with it, right? Yeah. I mean, we just, we don't know how to spend money. We don't know how to ask for more money. We don't think we deserve more money. I just need to remind everybody that we are brilliant, talented, and it's about time. We start asking for 1.3x and I know y'all going to be like, well, it should be 1.7x Aris. I know you're right. I'm trying,

PAMELA HARRIS: I'm trying. I mean, the fact that he went to 1.5 to begin with my eyes, because I was like, you usually go 5%. That's not the 5% we've been talking about.

ARIS WINGER: I love my paycheck. Yeah, that's right. That's right. Yeah. So it's hard. It's complex.

PAMELA HARRIS: No, because we've been made the feeling and, you know, I wrote about this and, and I, you know, it was like the first time that I, I had like recorded myself talking through, through a blog that I created. Right. But it was like the, Do I Owe You? And so I think a lot of the times that we are made to feel like we owe a debt for having gotten through a PhD program, but then we also it to the community to talk about our pain, our stories, you know. And I just had a conversation with my thesis student this morning, you know, she is a wonderfully gifted black mathematician, and we have these conversations about what it's like being a woman of color in this and these spaces. And over the weekend, you know, we had a, a slight exchange during one of the coffee breaks at the conference that we organized. And she said, Oh, people will be taking my time. And I said, put that on the agenda! Because she sends me an agenda, you know, right before we meet, I always get an agenda of what we're going to cover that meeting. She's phenomenal. I love her. Shout out Kimberly Hadaway. She's going to Iowa State, getting a PhD. And, and, you know, we were having this conversation this morning about the constant belief that, that we are, we are made to think that we owe our story to mathematics, right? And then you end up on a fucking game card and somebody else gets to tell your story. You don't even get to edit your own damn story. You know?

ARIS WINGER: See last week's episode

PAMELA HARRIS: See last week's episode and more recent Facebook posts where more women of color are talking about how their shit also is all messed up anyways. Yeah. Yeah. There's, two is a pattern. It's all I'm saying too is the, but, but that's the thing. Right? And then, so I said to her, I was like, there's going to be a point in your life where you're going to be able to say that sounds like a really interesting opportunity. Can you tell me more about the honorarium? Yes. That's the sentences that you need to add to these emails, right? So, so what do we just have people invite us to think and tell us that they're going to pass? So that is that's good leadership. That is good leadership, good leadership looks like this. You invite a person of color to come to your colloquia. You find them funding because you know, what's going to happen. Inevitably, when we show up in these spaces, the few students of color that you have in your department,

maybe for the first time ever, they meet a faculty member of color, we're going to build a friendship, a relationship, a mentoring network. We're going to connect them with opportunities that you probably don't even know about. And we're going to do that for years. And you don't pay my salary, pay my salary. Right. And so that's good leadership. You want to be a good department chair. You want to be a good organizer for a seminar, a good, you know, organizer for a conference. Do the legwork, find some funding, invite us, let us say no, but be ready to offer something.

ARIS WINGER: Absolutely. Yes. Again, complicated. Right? I mean, there's good. And so the, the criticisms of, you know, the, the critical reflections are to make everybody better. That's right. Let's just be clear. Yeah. I mean, we're just trying to make the discipline better. So yeah. Hope you don't take it personally.

PAMELA HARRIS: Oh they will. But they'll get over it.

ARIS WINGER: Yeah. Well, and if they don't, that's fine too. Right. But yeah. So if you haven't figured out who I was, I'm the last 12 episodes. I'm somebody that is from the call. You know, because what are we talking about? Let's just get back. Cause every time, you know, contention, you know, tensions rise, that's come back. We're talking about young people. We're trying to, we're trying to serve young people best. And you know, there are times when, if we want to serve young people best, we want to put them in front of somebody who, who knows who has their expertise and is also being paid for the value they are contributing.

PAMELA HARRIS: That's right.

ARIS WINGER: That young person will be treated better.

PAMELA HARRIS: You just said, you just said it, you just said it. You know why we, as people of color, don't get offered honorariums to come talk and mentor? Because it's not considered valuable. Yes. It's not considered valuable because here's the thing. Every single university brings in speakers and they pay them money. Okay. And that's like some, some white dude that started a business that has an app.

ARIS WINGER: Yes.

PAMELA HARRIS: Oh, they'll bring him and he'll talk to the students and he'll never answer emails from those students ever again, but he got his 10K out of the institution, but you and I show up into these spaces and we're going to mentor students for the next 10 years and that's not considered valuable. Yeah. Right. That's just considered

something. We owe the math community because we were the ones that made it.

ARIS WINGER: Yeah. So yeah. So these leaders need to take a look at their budget and how they're, you know, where this money is allocated and how it gets there. Yeah. Yeah.

PAMELA HARRIS: All right. We also did get a question in the mail bag about this AMS Report Towards a Fully Inclusive Mathematics Profession. And so we are here to talk about that as well.

ARIS WINGER: No, this is the mailbag episode. And again, you know where I'm going to start. I want to thank all the members on the committee, and I'm going to thank some people at the AMS for writing this, it was beautifully written in a lot of ways. I mean, it starts off with this, this incredible story about a black mathematician who had to struggle to get through. And the obstacles that, I mean, it was just, well, well put together, right. In this document, they do a couple of things. Right. I think that they, they mentioned, you know, a report, a similar report that was written, you know, a few years ago.

PAMELA HARRIS: Lots of years ago

ARIS WINGER: 1996. Yeah. Oh my goodness. Yeah, that's true. That's right. It's a few years ago for me, it's a few because I'm really old.

PAMELA HARRIS: Stop aging yourself!

ARIS WINGER: Yeah. Yeah. It was written in 1996 and you know, they were dismayed, the office has made that this report sounds a lot, like a lot of the stuff in that report has not changed. And so, so yeah, I think, I think it did a great job listing some of the problems and some of the issues. And so, I mean, my challenge and, you know, my concern had been that the report, you know, there looked a lot like the report in 1996 in terms of what, what was being recommended and what was being said. Right. And so, you know how we are in the show, what else can we be? But not discreet. Right. And so, and so somewhere, maybe it's not this report, but somewhere we've got to write something that's scathing. You gotta write something that has some anger and it has, you know, in order to be our best full selves, we need all the emotions. Yeah. And in this discipline, you know, there's not enough like, yo, this isn't right, this just isn't right. And we got to do something different. And then the other concern of course, is that the recommendations just don't go far enough and Oh, Oh my goodness. I love Francis Su and the crew. I do, I do. I love this crew. Right. But let's just be clear that when you say you want

one person to be the Director of Equity and so forth, and you want to infuse this person in Pamela, what have you? And I've been saying, time, and again, it's not an extra thing, right? You're not just tacking on this. Right. And so we've been talking a lot about equity audits go inside of every single thing we do. Call it all into questions. Right? I hope this person does that. Right. This person's supposed to come in and do that. Right. So that's the hope. It's just that I, I'm skeptical. I'm skeptical.

PAMELA HARRIS: Of course, of course you're skeptical. Let's just talk about the history, right? There was a Director of Education and Diversity and Inclusion, right? A few years ago, when that person was no longer employed by AMS, AMS, split the positions and one never got filled. They filled the education position! That tells you which one is missing. And so. It it's just, it feels really disheartening. I think like, I, I read these recommendations, right? There's 10 recommendations. There's a very beautiful executive summary that talks about the findings. Right? They did tons of interviews. They have quotes, but the truth is that the recommendations, I don't know how they fix things like finding, right? Which says black mathematicians suffer from a lack of professional respect and endure microaggressions even today. Tell me how the Vice-President for Equity, Diversity and Inclusion is going to address that because that's not clear to me. You can just fill that position with another white person. Yeah, cause that's who gets these positions, at least in the recent history. What are they going to do? And also where's the transparency, like where, where were the, you know, town hall meetings for us to have an out and have these discussions in public? Because I think the second that you have these conversations behind closed doors, then you're hearing like little snippets of stories, but you know what, when somebody says this shit happen to me and then in the same room, 10 other people say that shit happened to them too. That's powerful. And those are the things that I find are missing from this. Like the, the lack of transparency. I didn't know when these interviews were happening. Why didn't I get interviewed? I have some things to add! Maybe my voice isn't important. What about town halls? Where was that community environment where we would feel comfortable as people of color sharing these issues, but also. Uh, it goes back to comfort, right? This is it's, it's uncomfortable writing these kinds of things. I am certain of it, but it is kind of comfortable to not have to do it publicly.

ARIS WINGER: Oh, absolutely, absolutely. Correct. Yes. In the most public spaces at the crowning moments of the discipline to bring up these things. Right. So yeah. So no, that's right. That's right. So what would it look like at the JMM if we had these hard conversations

and it is true, right? So that, I mean, what I'm hearing in part is that, that maybe if we had said, we want a Vice-President of Diversity, Equity, and Inclusion, who's going to do the following things, right. Who is going hear that here are the risky, challenging, difficult things that this person must do in order for them to be doing their job. Right. Because we said this last week, a couple of weeks ago, that DEI is hot. And that means that now everyone's going to want these positions. They're going to have high status and then people want to come in and they're not going to think that this requires a lot of dirty work that is tied to the suffering of people. Right? And that means you have to have hard conversations. That means you got to push the envelope. And if you're not doing that stuff, then you're not doing the job and we should get you. We should get somebody else in. And so I guess that we needed a little bit more there because when you say we want a DEI person at this point, that's the thing is, Oh, you want another face? You just want another title on your board to say that you've checked the box.

PAMELA HARRIS: And what did we just talk about? Is that person going to be somebody who is actually of service to the community or do they just need another feather in their cap?

ARIS WINGER: Exactly. Exactly. Exactly. Exactly. So, no. And I've been saying, we've been saying for weeks now. That it's that position, the I can't talk about the vice-president of this, of assessment of whatever, but the vice-president of DEI has a job that is different from all the other ones in the sense that that person, if they're doing their job well, they have to be in the trenches. They have to be thinking about Jamal, Leticia, Juan, and how they are being impacted every day by a system, a university, a department, a culture that they are supposed to be interrogating every day. That's much, much harder and different from being the vice-president of assessment.

PAMELA HARRIS: Yeah, no, I agree. I agree. And then the other thing is like, okay, so here's these recommendations. I haven't heard anything from AMS about how they're going to implement anything

ARIS WINGER: They're meeting this week, this month, right? I think, I think we'll know then that this is part of the transparency you were talking about. So on the website, on the website, they're meeting, they're meeting this month and this month seems to be about over. Yeah. So tick tick

PAMELA HARRIS: This is the sound effect episode

ARIS WINGER: Yeah, the clock is ticking

PAMELA HARRIS: the clock is absolutely ticking

ARIS WINGER: And look, here's the challenge. And again, I got to keep saying lovingly, here's the challenge. I need to hear it. I need to, you need to scream. Yes. Oh no, not this time. Yes, no, we're going to hear them. They can be like, you know what? We had this meeting and they're going to be transparent and they're going to say here's what we talked about here are the problems. Here's how we're going to change it. Right. I'm hopeful. I don't have optimism.

PAMELA HARRIS: I wish people could see my face. Cause it's just not going to happen. That's not going to stop it. No, it's not. You know, what's going to happen is going to be almost 30 years from now. We're going to be having these same conversations

ARIS WINGER: No, no, no. And so, no. And so this is the struggle because

PAMELA HARRIS: The 1996 people that wrote that report, like they had to have believed that the report was going to lead to change! Yes. They had to. There's no way that in 1996 they write this report and they think that they're not going to be listened to. Like, you think that didn't fucking hurt, that they like wrote the same shit in 1996. Are they even alive? Like who are they? I can't even fathom to go look and have a conversation with them to tell them how we have failed them! In 21 years. I can't even do math anymore cause I'm crying. But like 1996 they wrote the same stuff!

ARIS WINGER: And so this is, I mean, what else do we need to say about. We have. And so we cannot keep doing the same things. And we've been saying this too, that if we're going to do this, we have got to do something that is so different. It has to be so different. And that's the hard part because the thing is, we don't even know what it is, but what the marker is-This is why we keep talking about comfort all the time, because the only marker we have of what the solution could be is that it goes beyond making us comfortable because the answer is not the same stuff. The answer is. And again, we don't know what it is, but. It's something that we've got to do something so different. So broken, you know, I was telling Deans like, just do it. And this is what I mean about leadership. I was having this great conversation with Michael about leadership and about, you know, yes, leaders want to build consensus, but the Abraham Lincoln built, what have he waited to build consensus? You know what I mean? What if, what if, what if, what do we have people, leaders, LBJ. When he signed the voting rights act, LBJ looked at Martin Luther King Jr. said, look, I am not going to do this on my own. You have to push me to sign this,

to push this bill. Right. So it's one of these things that. Yes, you, you want to build consensus, but there are some things, and this is to all the deans and presidents, whatever. There's some things that you are just going to have to do that is tied to your legacy. And so too often, yes, to, and that's what I'm doing now, I'm tying this to your legacy. So you are the leader of these organizations, and you've got people suffering that have been able to be ignored all these years. I'm here to uplift their voices and say, under your watch, these people are suffering. So to the leaders of the MAA, the AMS, NAM, SIAM, all of them, we got some people suffering. And this is under your watch. And so when you get the award, you're all going to have to lead me outside. Chain me to something. Cause I'm going say no, no, no. When you were president, then here's all the people who suffered while you were president. Right. And unless you start turning the lens on these people, then yeah, no, but I I've become, this is the most emotional I've ever been in the show so far. And it's because exactly what you said, it just hit me harder than I could have realized that in '96, there were people suffering enough in this space and here we are. And it's like, yeah.

PAMELA HARRIS: And the fact that like, I mean, you know, maybe my, my, my imagination is running away wild. Right. But I like, I imagine these people in this room crying, right? Like doing the same thing, like gathering these quotes from people in the community in 1996, who still felt all of the shit that we deal with constantly on a day-to-day basis. And that this report kind of fell to the back of some dusty ass bookshelf that they happened to have found though, yo. Like they happened to have found this task force report from 1996 and we're like, Oh my God, look the exact same things we're recommending. And so that's the part that I find. Really just performative.

ARIS WINGER: No, it's devastating.

PAMELA HARRIS: But what I mean is like the, the AMS is performing. There's a well rehearsed dance. If we just, you know, appease, we can last another generation.

ARIS WINGER: Right, right, right, right. Right. No, but that's why it's about this meeting. They're meeting this week and when they read this, what in the world is going to come out of it and it just in case they don't know it's pain and suffering and yeah. We've got to do something different. No, but you know what? Your imagination is, not that off you, you know, you imagining them crying. It may not be crying, but it's pain. We know it's pain. So whether you're crying or not, we know that this is not easy to do. Oh yeah, yeah. Yes.

PAMELA HARRIS: Well, we had a lot of other things that we were going to try to discuss, but I feel like this, this call to action really that's, that's what I think we need to say, right? This is a call to action for new leaders. Rise up my friends. We need real change in the mathematical community. What has been done is not good enough.

ARIS WINGER: And I'm thinking of Nikhil, I'm thinking of Nikhil and it's because, you know, and again, from, from our previous episode where we talked about him, right, he put something on his poster board and a presentation that said that he was not down for white supremacy. Right. And so that, that makes me think that as the new leaders emerge, you must have in your compartment, in your skillset, the ability to do something different. Yeah, that is to say that for decades now, we've been doing stuff the same way over and over again, as you take leadership positions, please. And by the way, this is still to the old dogs too. When you get into new leadership positions, please have with you one or two things that you're going to be like. This is completely different and we're doing it because those, it's going to help those people over there for too long have been rendered invisible. Right? Yeah. And that, by the way, as we struggle in this discipline to figure out what a diversity statement looks like, as we still struggle with what a DEI person is supposed to do, can we let that at least be the minimum that when you look at their resume and what they want to do for your organization, you have to ask, well, what are the one or two things that you're going to do that are different, that are shocking, that will actually uplift people of color and other marginalized people in this discipline. Tell me what you're going to do. What's your ideas? And if it sounds like the same stuff, then low score, right? Yeah.

PAMELA HARRIS: But now we have to ask this real hard question, right? If George Floyd were alive today.

ARIS WINGER: Didn't I just finish crying?

PAMELA HARRIS: But we need to say it, people's memory is short, right? So if he were alive today, is this fucking task force report in existence?

ARIS WINGER: Oh no, no, no. That's no, absolutely not. That's yeah. I mean, they say almost as much in the document. Right. And so let us, let us stand back. You know, we, and just, you know, he died, you know, so, so unfairly in this world, it was an absolute tragedy. I've shed many tears about that over the last few months, and we'll continue to do so. As no justice has been served. Let me just be clear about that, that I have a formulation of justice that is tied to

something other than putting someone else away for 40 years. I apologize for that.

PAMELA HARRIS: I agree.

ARIS WINGER: But yeah, but, but so yes, but there is something about this moment. There's something about his death that has spoken to the nation. Right. And it's like, and I, as a black person, don't understand that because for me, there's negligible difference in his death versus the death of black man one, black man two, black man three. Right. And so, but that's fine. So this is somehow has resonated. And so again, we also have to treat this with care as well because the response to it can't be, oh, let's just let black people have everything. Right. That, I mean, because that's, again, what we're jumping over, what everyone's tripping over is the hard conversations that you have to sit down and look me in the eye and then we have to talk. Right. We have to have mechanisms like you were talking about the town hall. It's like, we have to have these conversations. And yeah. So your response is yes. Have to be. Let's change policies. Right. But why, tell me what you're trying to achieve. Tell me anything right. About what you're doing in response to this.

PAMELA HARRIS: But this is why I feel like it's so fucking performative. It's so performative, right? Because how many black people have been killed at the hands of the police? Since then? Like, my daughter's birthday is today. She just turned 15 and last week we had a young black woman murdered by the fucking police. And it's like silence from the math community. Right. Like, like it has to like, when does it just change? Like when does it not feel like it's just a performance. Oh, NAM put out a statement. So AMS has to put out a statement. So then, so, you know, there's like a domino effect and like that's, that's the thing that just feels so crappy to me about this report. Right. And that's why I'm like, I think back to just what it must have been like in 1996, being the people that wrote that initial report. And then I'm like, what about in 1966? What was that report like? Was there no report? Right? I don't know. I, I don't want to lose hope, Aris. I don't want to lose hope. I want to say if we continue to, to just push for change, change will come. But I think what we need to push is maybe not for change, but we need to push for better leaders. Right? That's that's I think what we're missing like this, this leadership that is currently sitting in these spaces, they're passive. They're, they're, they react, right? They're not, that's not the definition of a leader.

ARIS WINGER: That's correct. That's correct. Active. Going after what the problems are. Absolutely correct. No, no, no. And this is a call out to the leaders because one of the things that we figured out is that there are, everyone's got their boundaries and yeah, we, you know, we wanna make change in the department. We want to make change in the department. We wanna make change in the department and we can do that. But until some point, and that's why I just figured out then that's when we need the Dean to swoop in and say, it looks like you've reached your boundary, but you know what we doin this shit. That the DEI is part of the tenure process, whether you like it or not. And that's exactly. Yeah. And that's right. And so, yeah, that's when, when you try and be in the trenches and try and make it happen, and then all of a sudden it's not, then you just gotta go higher. Right. And so, yeah, I mean, whether that's, you know, Dean, president, provost, whatever right. And put pressure and all of that. So, but yes, this is a call out to new leadership. Really it is. I mean, and, and by the way, that could be the current leaders, but they need a reorientation of the mind.

PAMELA HARRIS: That's right.

ARIS WINGER: Yes, yes, yes. Yes. Because now, again, as we've been saying about graduate departments about, across the board, that we're coming over with new criteria for what greatness is, yes. And greatness is tied to serving people and not having people suffering under your watch. Yeah. It's just that

PAMELA HARRIS: At a minimum, right?

ARIS WINGER: Yes. That's why I keep coming back to the suffering piece. Right. Because it's like, let us have less people suffer. And you know what I'll call you. Great. Then you don't have to publish anything. You don't have to promise a damn thing, but if I can get that group of people, if I can get our native people to say, you know what, when, when that person was running the show, we felt valued. You win

PAMELA HARRIS: 5% change.

ARIS WINGER: Oh my god. Yeah. Right now. Yes. But right now my eyes are open. As I said, at the start of the show, my eyes are open to the, to finishing this semester strong and not having my comfort in finishing in a couple of weeks. And the, and the happiness and joy that, that brings cloud the fact that this is a very difficult time for our young people to be finishing the semester during a disastrous 12 months. And so, yes, the finish line is I don't even see the finish

line. I see students. I don't see the finish line. I see people that I'm trying to get there.

PAMELA HARRIS: Yeah, no, that's powerful. I've been working on getting feedback from my students on the feedback that I'm providing them. Right. So I'm teaching this research course, like I've mentioned. And I started trying new things, like recording myself on zoom, reading their research articles and just kind of struggling through it. And then I was just like, I'm doing this thing and I think it's good, but is it really? And so, you know, just, just flat out asking students, tell me what you think about what I did. If it's not good, I'll fix it. Right. And just getting their feedback was really powerful. And also I think it, it led to having such good conversations about the fact that as an educator, I'm still learning that I don't know it all! Your prof doesn't know it all. And that's okay. Right. So I think really I've been working to, I guess, show students that that's all right. Especially at an institution like Williams, where "everyone is excellent." Insert mechanic wave. Like that, that has been, I think, really powerful. And I feel like one additional benefit of it has been that I've gotten to connect with my students this semester, over this virtual remote teaching and in ways that I never expected. And that has been really pleasant.

ARIS WINGER: Excellent. Excellent. Excellent.

PAMELA HARRIS: All right. Announcements. Well, you know, we were organizing a pair of distinct workshops. Yeah. So sponsored by the Center, we have a workshop coming up that is for REU mentors and directors, and it is a DEI workshop. And so I think it's, it's really the first of its kind. I've never heard of anybody ever doing one of these. And I'm like, yeah, see research experiences can make or break a student's desire to continue on in the, in the field. And they should be positive research experiences. And so we're going to be having a whole day of program May 22nd. So you can check that out at minoritymath.org/reudeiworkshop2021.

ARIS WINGER: Absolutely. And so another workshop is math slash rap workshop. They were thinking about at the center, Alexander Acosta and myself are working on thinking about hip hop artists as mathematicians thinking about, thinking about hip hop as a mathematical expression. Right. And so, Oh yes, yes. Yes. So you'll be hearing about this in the coming months. So we talking about June, the end of June, we'll be having a workshop there, three days and just talking about the history of hip hop. And tie it to mathematics and where it shows up and how, when you look at a hip hop artists, you're seeing someone who's performing mathematics right in front of you.

PAMELA HARRIS: Oh my gosh. Yeah. See, this is, this is. Wow. It's the dream.

ARIS WINGER: Yes. I know. Yeah. We're trying to look, we're just trying to do what we said we were going to do in the first place, center our voices. Yeah. Right. And so again, let us know, contact us @minoritymath, right. And all in all the places we were about to say in just a second to let us, if you're interested in doing a workshop at the center, it is there. They got money, yo. Do it.

PAMELA HARRIS: So talking about money, they also helped sponsor the workshop at MSRI on Mathematics and Racial Justice. So that's taking place June 9th through the 18th. It's a math workshop. They're going to be talking about the mathematics behind racism. And so that's going to be the, oh, and I should point out that the speakers on the schedule are already up and you can register for this. So please, please check that out. MSRI workshop on mathematics and racial justice.

ARIS WINGER: That, that list is impressive. So yeah. Yeah.

PAMELA HARRIS: Star-studded for sure. There's also a new announcement from Mathematically Gifted and Black. The Dr. Sylvia T Bozeman pre-doctoral fellowship. If you're I know, I mean, making, making change, yo, I'm so excited about it. So you can go to mathematicallygiftedandblack.com/funding for more information.

ARIS WINGER: Fantastic. All right. Are we good?

PAMELA HARRIS: I think we're good. So hit us up, send us, you know, your tweets @MathUncensored, or @minoritymath, or you can hit me up @DPEHarris or Aris @ArisWinger.

ARIS WINGER: I appreciate that. Dr. Harris, thank you as always. Thank you. You've been listening to mathematically uncensored, where our talk is real and complex.

PAMELA HARRIS: and never discrete. Later!

[Music]