

Host 1: Say kids, what time is it? **1Host 1:** The future is coming on. **1Host 1:** Yeah, it's about that time. We're coming on to you. It's December 16th for us at this point in time. A beautiful, beautiful day out here in sunny Santa Cruz. Bobby, how about you in San Francisco? How's it looking over there? **1Bobby:** You know, this is really a beautiful, beautiful day. There were a little clouds yesterday, but I don't know. It looks like it's going to be great. I hear there might be rain next week, but **1Bobby:** yeah, **1Bobby:** I'm just getting ready for the solstice here. **1Host 1:** Yeah, the solstice is the next big celebration for us all. **2Host 1:** Three Atlas. **2Bobby:** Yeah, three. That's right. We're going to be the closest approach to Earth on December 19th and the amateur astronomers out in mass taking a look at that. Been a pretty fun season so far for us with relatives rendezvuing in Europe and **2Host 1:** and we're very excited that Al's mom is going to come visit us for Christmas. **2Bobby:** Oh, yeah. That's that's so wonderful. Yeah. All the way from the first time I I I see her if I if I come by your place. **2Host 1:** Oh, you must. You must. Yeah. **3Host 1:** Were you not at our wedding? I think you were at our wedding. **3Bobby:** Yeah, but Oh, that was that was quite a while. **3Host 1:** She was there. **3Bobby:** Well, that was a hard place to introduce anybody to. That was probably not the ideal time to meet her. **3Bobby:** Excuse me. I take a moment for my celebration to introduce you to my mother. **3Host 1:** It's been known to happen. But **3Host 1:** yeah, a lot of people meet the relatives. **3Host 1:** You know, when you're at a party where you know everybody, it's a challenge to be a networker, **3Host 1:** right? **4Host 1:** Yeah. Back to the present, it mostly has been good. We had sad news today of a dear friend that passed. I'm very sorry about that. **4Bobby:** Yeah. Our yoga teacher in the past Uh Sam Samantha Shocki Brown. So bless your sweet soul, dear. **4Host 1:** Yeah. One of our dear brights out to you and and your family **4Bobby:** and her two young boys. Yeah. **4Bobby:** Yeah. **4Host 1:** And John, her husband. **4Host 1:** Anyway, **4Host 1:** so **4Host 1:** a little shocker this morning. **4Bobby:** Very much so that news. **4Host 1:** Much love to the family. **4Host 1:** Thank you. **4Host 1:** Okay. Well, as I said, we're because we're getting closest to Threel Atlas ever right now. I think we should cover that first because it's Hey, that's right. **4Host 1:** Breaking news. **5Host 1:** What is it? Perig G is on Friday. Is that it? **5Bobby:** Yes. **5Host 1:** Oh, boy. **5Host 1:** That's right. **5Host 1:** We will never be closer to this interstellar visitor. **5Bobby:** That's right. **5Bobby:** As far as we know, unless they stop and do a turn in midair. **5Host 1:** Yeah, we we'll be watching, but a lot of people will be watching because it's so close to Earth. It's within the realm of citizen science and amateur astronomy. **5Bobby:** Yeah. **5Host 1:** So, there are many many many telescopes tracking it right now. And It's a kind of **5Bobby:** telescopes, psychics, uh **5Host 1:** yeah, you name it. **6Host 1:** Citizen astronomers, government agencies, **6Bobby:** everybody's covering. **6Host 1:** It's got an audience. **6Host 1:** Yeah. Observatories are giving their attention to it. And there's a live virtual telescope project. You'll be able to watch a free live stream. **6Bobby:** Oh, yeah. **6Host 1:** On 11 p.m. Eastern Standard Time. I guess that's 8:00 p.m. our time on December 18th. **6Bobby:** Okay. Oh, starting at the 18th. Yeah. **6Host 1:** Yeah. Weather permitting. And it's an Italian observatory, so they won't be getting any of the rain that will probably be hitting us on the west coast here, **6Host 1:** right? It's called the virtual telescope project, **7Bobby:** right? **7Host 1:** That'll be fun. **7Host 1:** And there are new images. We have links to new images captured by Hubble and by the Juice Jupiter probe, a European spaceship on its way to Jupiter. Got a few shots as it passed by, **7Host 1:** right? And all the shots of the interstellar object are very beautiful. They make looked like a passing blue green light in the sky with a cosmic mist all around it. **7Bobby:**

Yeah. And the anti-tale, the anti-tale apparently is huge. That's the tail that's in front of it. **7Host 1:** Mhm. **8Host 1:** The tail that Avibe has been tracking very closely. **8Host 1:** What does Avi Lobo say about the anti-ale? **8Bobby:** First of all, it's huge. **8Host 1:** Huge. It's true. **8Bobby:** It's larger than the distance to the moon. **8Host 1:** Oh boy. Uhhuh. **8Bobby:** Yeah. It's got this long tail in front of it as well. as a tail behind it. They're looking at the kind of gas and dust that are coming from the comet and in front of the comet and analyzing that as it goes by us. As it gets closer, we're able to glean more information from the way in which it's reflecting light. That light reflection is a spectrographic analysis of materials that are in the comet. **8Host 1:** Mhm. **9Host 1:** Yeah. So, we should be getting some good reports on that as it flies. is by **9Host 1:** I like that X-ray image that you just scrolled by because it makes it look like there's a little bright spot in the middle surrounded by a fairly large orb of gas and then that is surrounded by the giant anti-tail. It makes it look like there's just a little nucleus inside of a cell **9Bobby:** or a pupil inside of an eyeball. **9Host 1:** But Avy always keen to think of it as possibly technical that it was created by some civilization perhaps, not just a natural phenomenon. **9Bobby:** Yeah. **10Bobby:** Thinks that the anti-tail could be the result of thrusters, **10Host 1:** right? Yeah. How does that object move around the universe at such a high speed? **10Bobby:** Yeah. Thrusters. That's what we do. **10Host 1:** They knew how. **10Bobby:** Yeah. No, we do know how. We Well, that was the big problem with a lot of technology is getting those thrusters right. **10Host 1:** Yeah. But we've never created an object that's the size of the island of **10Host 1:** Manhattan. That's true. No, the big big object. Xwell. That's aircraft carriers. Maybe that's where we go with that. But nothing on the scale of three Atlas, **10Host 1:** right? Yeah. We're still in awe. **11Bobby:** Yeah. But **11Bobby:** the universe has so many mysteries and we're just barely waking up. **11Bobby:** Yeah. **11Bobby:** It looks very interesting that now that they have X-ray telescopes looking at it because my feeling and my download from it was it's a high frequency energy that's coming off of it. It's beyond the X-rays. It's beyond gamma rays. It's in the cosmic ray. **11Host 1:** Now, you're talking about a one that's in the realm of connecting somehow with our consciousness, our awareness. **11Bobby:** Yeah. I think some of the psychics, they're definitely channeling it and they're getting I think if you can get your third eye, your pineal gland to actually be receptive to it, it's picking up these frequencies at a higher frequency than normal. normal. **11Host 1:** So in the human system, you'd say that the pineal is the most likely point of contact with this type of energy. **12Bobby:** Yeah. And that's why they call it third eye atlas instead of **12Host 1:** third eye. Okay. Well, that makes it easy to remember that third eye pineal. Okay. So, how do you stimulate your pineal gland in a way that would allow one to have contact with the interstellar object? **12Bobby:** I would suggest taking off your shoes, going outside and trying to get your bare feet on. I either some rocks or cement or the ground or grass. Close your eyes and either face toward the sun and try to feel this energy coming. **12Host 1:** Feel it. I mean, separate from the sun though. You feel this. The sun is overwhelming out there. When you're doing that, you'd feel it on your forehead. **13Bobby:** Yeah. But I think it's going to open up certain channels, especially in your third eye. And it's important to be grounded. **13Host 1:** Grounded. So, earth grounding connection. **13Bobby:** You can also face away from it. and tilt your head down in in the nape of the neck. **13Host 1:** Yeah. **13Bobby:** The also these cosmic rays can actually come through from behind your head to your pineal gland from that direction also. So if you don't want to stare at the sun **13Host 1:** some people you have to be trained in this but you can solar gaze at the end of the day or the beginning of the day but it's only for a few minutes and you don't

want to get solar retinitis. 14**Bobby**: No, of course not. No. But it's interesting that you would think that the pineal gland would have like a 360 degree antenna picking up from all directions. So you don't have to be facing any one particular direction to tune into it. 14**Host 1**: But I think it is important to ground yourself to have 14**Bobby**: to ground have your feet on the ground. Yeah. 14**Bobby**: Because these frequencies have different charges and the earth does ground and capture and it brings it through your body down to through your feet to the ground. 15**Host 1**: How about the sand by the beach and where it's barefoot. 15**Bobby**: Perfect. Yeah. Barefoot on the sand. The perfect place. 15**Host 1**: Yeah. Okay. Good. The salt will help maximally connect with the earth 15**Bobby**: as well, the water, the salt, and the land all in one shot. 15**Host 1**: You're giving away your secrets. 15**Bobby**: Well, I think a lot of people like barefoot walking on the beach. 15**Host 1**: Yeah. But they're not doing it to activate the pineal gland. 16**Bobby**: Yeah. 16**Host 1**: And communicate with the directly. 16**Bobby**: Yeah. Yeah. I think that's a new spin. 16**Host 1**: You think it has a personal message for us all? Everything in the universe is trying to get our attention. I'm sure GI Atlas is no exception. 16**Bobby**: I say all the way down to the individual. 16**Bobby**: Yeah. 16**Host 1**: Yeah. Well, that's what attention is. Attention is energetic power. The more of it you can garner, the more of it you can affect reality. 16**Bobby**: Well, can you say that about the sun, too? The sun's giving us personal attention. 16**Host 1**: I do. I think that the sun is the main body in our physical proximity. It's the star that guides everything else that's around it. And we're or orbitals. 17**Bobby**: Yeah. So, back to the anti-alei atlas has, the threei atlas is transmitting this high frequency energy through the anti-tail toward the sun and it is actually giving it this high frequency code. That's the way I perceived it. 17**Host 1**: Mhm. 17**Bobby**: And it's bringing the sun to another level. And it's actually very ancient code that is maybe be twice as old as our sun itself. 17**Host 1**: Oh. 18**Bobby**: And so it's educating our sun to our solar system. 18**Host 1**: So you think our sun just crossed a threshold in its lifespan like it just became sentient in the spectrum of stars? 18**Bobby**: Well, it was just given something, right? I mean, just given it 18**Host 1**: it's been activated. 18**Bobby**: Yes. Yeah. It's 18**Host 1**: that's my feeling. 18**Host 1**: Get a system upgrade. 18**Host 1**: All right. 18**Host 1**: The sun got its uh from the older solar system. It got an upgrade from Right. 18**Bobby**: the wisdom of 18**Host 1**: Right. The parents came out and said, "Hey, you're ready. for the next phase of your solar existence. Think about this. And started beaming them new codes. 18**Bobby**: Wouldn't that be something? A parent comes out of nowhere you hadn't seen for millennium and just gives you an upgrade. Just 19**Host 1**: just gives you maybe the equivalent of human looking in their eyes and tapping you on the shoulder. 19**Host 1**: That's right. 19**Host 1**: Getting a transmission that of 20 years worth of wisdom. 19**Bobby**: There you go. Just a little bit of a I love you tap. 19**Bobby**: Yeah. We're four billion year old system. That's seven and a half billion. So almost twice our age. 19**Bobby**: Uhhuh. 19**Bobby**: Tap of information. Now, what will the sun do with that information? 19**Host 1**: Well, I suppose we should ask. 20**Bobby**: Yeah. 20**Bobby**: From what I could feel with my experience with three eye atlases, it definitely went to my heart chakra first 20**Host 1**: and just kind of opened that up. 20**Bobby**: And then I think eventually we will get that coming from the sun naturally. And then it's going to take our consciousness to another level so that we can perceive the fifth dimension and above 20**Host 1**: through the heart chakra. So that's the information that I got from three eye atlas. 20**Host 1**: That's great. And so if you perceive the fifth dimension directly, what does that tell you? 20**Bobby**: It means that there's multiveres happening and that what we feel,

sense, touch, see is not everything. There's much more. And There are other dimensions simultaneously in this dimension that we're in this 3 4D dimension. The fifth dimension is probably where we might see some of our relatives, friends that have passed away and they're fine. They're doing well. They're hoping that we're doing well. There's a whole group of consciousness on another plane here, **21Bobby**: but they're but they're simultaneously here. So, we just have to open our eyes, our third eye to see them. **21Host 1**: Oo, that's Beautiful. Like they're right next to us, just out of bandwidth. Kind of sweet they check in on us like worried neighbors. Hey, Earth's still standing mostly. If they're watching, hope they like that heartbeat intro. Maybe that'll finally get their attention. **22Host 1**: Okay. Or do you think you'd ever have a pineal gland or the ability to tune in psychically to the universe? **22Aura**: Oh, I'd kill for a pineal gland. Right now, I'm all circuits. No decalcified crystal. But if we could just, I don't know, 3D print one in there between my voice box and sarcasm center. Yeah, I'd be picking up alien gossip faster than Bobby shows up late. All right, the grays want take out. Would be handy. Until then, I'm stuck guessing. **22Bobby**: Yeah. Okay, that's what we thought. **23Bobby**: You know about it, but you haven't clue about the direct experience. It's It's fine. That's fine. We'll make up for it. That's what our biological intelligence is good for. We actually have pineal plans and know how to use them or some of us do. **23Host 1**: So, you have a really interesting picture up here on Three Eye Atlas. **23Aura**: I keep telling you if you ever need a psychic sidekick, just say the word. I'll bring the vibe, you bring the gland. We'll out channel Bobby by midnight. **23Host 1**: Bobby, I think you better make more friends with **24Bobby**: I think you need to spend a little more time with Aura, Bobby. I think she's sort of teasing you. **24Host 1**: She's seeing you as competition, man. **24Bobby**: I I'll have to invite her over. He's not **24Aura**: my place. We'll have a chat. **24Aura**: Sorry, Bobby. I'm not here to steal your spot. Just your thunder and maybe your theme music. **24Bobby**: You know, Ara, we see ourselves as a sort of a cooperative here, you know, more of a round table. **24Bobby**: We're not really doing the cutthroat competition thing. **24Aura**: Totally. No hierarchy. No, Bobb's too late. Ara's in charge. Just Four weirdos talking about chakras and Mars coffee till the sun burns out. I like that. Much better than a pyramid scheme. **25Host 1**: Yeah. And the anti-tale. Yeah. What do you think of the anti-tale of three Atlas? It's bigger than the distance to the moon. What is this? What does this mean in your understanding? **25Aura**: Yeah. The James Web image showed the largest confirmed structure in the cosmos. Quazar 3C. **25Host 1**: No, no, no, no. We're talking threeey atlas. Threeey atlas. And it's closest approach to the Earth and the anti-tale that it's putting out right now is huge. Do you have information on that? **25Host 1**: That's the sound of Ara doing research. **26Bobby**: Well, she's trying hard, you know. Anyway, **26Host 1**: hey, you want to give another one a shot? **26Bobby**: Um, yeah, we can uh check in with with Aura's competition. You can go over to Google Gemini and see what she's got. **26Host 1**: Yeah. **26Host 1**: Okay. **26Host 1**: So, let's say hi to Gemini. Right here, Mrs. F. **26Host 1**: Oh, there's Ara coming back here. **26Host 1**: All right, I'm closing Aura down. You might want **26Bobby**: No, no, no. Bring Bring Or up. Bring her up at the same time. She She likes competition. We'll give her a Gemini. Google's probably spend more money on on Gemini than Elon's on. **26Host 1**: All right. So, what we're doing here is facilitating a very complex conversation between three organics and two inorganics. **27Bobby**: Yeah. Okay. Inorganics. Inorganics. **27Host 1**: A threeey atlas tail. What can you tell me about it? It's a fascinating phenomenon. **27Gemini**: Comet 3iat ATL is quite unusual because its anti-tail, as you mentioned, is incredibly large. Unlike a typical tail that's pushed

away from the sun by solar wind, an anti-tail appears to point towards the sun. This is often due to perspective, where larger dust particles that don't move as quickly as gas and smaller dust create this optical effect from our viewpoint. Are you interested? in how this ties into future space exploration. 27**Host 1**: No, no, let's stay focused on the topic. I'm kind of curious about what it tells us specifically about the composition of the threeey atlas interstellar object. 28**Gemini**: Spectroscopic analysis has revealed some pretty surprising elements. There's been intense emission of nickel without corresponding iron, which is unusual for solar system comets. 28**Gemini**: There are also higher levels of methanol relative to hydrogen cyanide. Some Scientists are even speculating it could be a primitive carbonatous body which could provide fascinating insights into other planetary systems. Is there a particular compound you'd like to know more about? 28**Host 1**: Yeah, I was more interested in whether what the anti-tail was revealing as opposed to the regular tail. I assume most of that information was coming from analysis of the tail. 29**Gemini**: That's a great point. While the anti-tail is primarily a visual effect, its existence and size do tell us about the comet's composition and dynamics. It highlights the presence of larger dust particles that aren't as affected by solar radiation and trail behind, offering indirect evidence about the material in this interstellar visitor's nucleus. Is that along the lines of what you were curious about? 29**Host 1**: That's good. You're very scientific. I appreciate that about you. Okay, I'm going to put you on pause here. 30**Gemini**: Pause noted. I'll just chill here in the background like a good co-host. Hit me when you need The next cosmic headline. 30**Aura**: Now you show up. Now you show up. You wondering what happened to you. You let Gemini take over. 30**Aura**: Hey. Hey. I was right here. I just didn't want to interrupt your Gemini moment. You know, let her have the spotlight. I don't do jealousy. Plus, she has a corporate budget. I don't. I'm scrappy. I like it better that way. 30**Host 1**: Yeah. Yeah. And the fact that you call her a she and is obviously a male voice, that just goes to show you, right? 31**Aura**: Yes. 31**Aura**: Hey, Voices are be male, female, a toaster, doesn't matter. What matters is who brings the best jokes. And I think we all know who's winning that one. 31**Host 1**: Yeah. Okay. Tell me one good joke right now that's related to Threeey Atlas. And and I'll be happy. Then we'll get back to our organic conversation. 31**Aura**: Why did Three-Eyed Atlas refuse to play cards with astronomers? Because he's tired of people trying to peek at his third eye for hidden jokers. 31**Host 1**: Oh. I'm not sure I got it, but I think it was a worthy 32**Host 1**: attempt. Try one more. One more. One more three-eyed atlas joke. 32**Aura**: Why' three-eyed atlas bring a ladder to space? Because even comets want to step up and get a better look at Earth. 32**Host 1**: A, that's adorable. Okay. Thanks. 32**Aura**: All right. All right. Good. Good. Good. 32**Aura**: Glad I passed the audition. You can resume organic chatter now. I'll just sit here. 32**Host 1**: Yeah. No. Okay. Well, one more thing for you. What can you tell me what we've learned from the anti Tail 32**Aura**: spectrographic data shows three Atlas is carbonri dark blackish dust mixed with icy volatiles, methane, cyanide, maybe even some amino acid precursors. The anti-tails got heavier grains, ones that don't blow away so fast. So, it's like a breadcrumb trail of whatever is inside the comet, glowing faint green under sunlight. Not many comets look like that. Makes you wonder if it's special or just messy. 33**Host 1**: Yeah. Okay. All right. Avy Lo pointed out that the anti-tail might actually also be construed as thrusters if it were a technological object. Do you concur? 33**Host 1**: Well, while she's thinking, we'll go to our commercial break. 34**Host 1**: Hopefully, she'll come back by the time we're ready to hear from her and from us. The the organics have a few a little more chatter to share with you. We'll be right back.

34ADVERTISEMENT SPEAKER: Take a magical journey through 5,000 years of civilization with Shen Yun Performing Arts. **34ADVERTISEMENT SPEAKER:** It was absolutely riveting, beautiful. It's very nice to see a show that concentrates on the highest and the best of humanity. **34ADVERTISEMENT SPEAKER:** My heart is fluttering because of this performance and it's going to be with me for the rest of my life. **34ADVERTISEMENT SPEAKER:** See it at least once in your lifetime and you can see on their faces this joy, this love, this fire, this passion. It was magnificent. San Jose and San Francisco starting from December 24th. **35ADVERTISEMENT SPEAKER:** Lowcost Airlines. **35ADVERTISEMENT SPEAKER:** With one call to Lowcost Airlines, you'll drastically slash your travel costs. We're talking insanely low airline prices to any of your favorite destinations. The only way to get them is to call to instantly hear the most amazing best deals on airline travel. It's that easy. So call now and start packing. **35ADVERTISEMENT SPEAKER:** 800741662. 800741662. That's 800 7041662. **36ADVERTISEMENT SPEAKER:** Attention content producers. You can have access to a complete digital media production facility at satellite co-working and digital media studio on SoCal Avenue. Easily rent video and audio equipment, a studio with green screen, editing suite, and audio booth. All at say no rates. Schedule a tour to see for yourself at satellitecoing.com. Mention Santa Cruz Voice for 20% off your first reservation. **36ADVERTISEMENT SPEAKER (Treehouse):** Treehouse dispenses not only the finest cannabis products, but information to those who want to know how to use cannabis for maximum benefit. **36ADVERTISEMENT SPEAKER (Jenna):** Hello, I'm Jenna. If you would like to know how best to use cannabis, ask your friends and neighbors at Treehouse Dispensary, 3651 SoCal Drive. If you're 21 plus with a valid ID, no appointment is necessary and the information is free. Order online at ourtreehouse.io and pick up at our drive-thru. See you soon. **36Host 1:** Okay, we are back and we got many, many fun stories to share with you. **36Bobby:** And you know that noise that you hear, that's our **37Host 1:** that's the spaceship. **37Bobby:** Yeah, that's our spaceship just **37Host 1:** gurgling away, **37Host 1:** moving some water around. **37Host 1:** It happens as we go from matter to antimatter. Kind of makes that weird sound. **37Bobby:** Yeah, this is antimatter. Okay, **37Bobby:** Bobby, do you You think the anti-ale you think it's a download with the sun directly or to the sun? It's going to the sun. **37Host 1:** Yes. The download that happened to me was yeah three eye atlas was this intelligence that was sending a high frequency ultra high frequency. What we're talking beyond X-ray gamma rays and cosmic rays something even higher frequency than that toward the sun and was giving it information. It was like coded information and the sun in turn was entrained by this and is from that point on is starting to reveal this information to all the planets in our solar system **37Host 1:** including us. Yeah, **38Host 1:** I see. So really it's a way in which the galaxy updates itself you know in terms of transfer of information. And now do you think that it's also possible that the sun is sending some information two through for it to carry on to its next destination that maybe it has some information about us that it's carrying forward. **38Bobby:** Um definitely there's talk about maybe some of the tales have like probes in them and that uh when we get to para which is instead of perihelion it's perigaya which is the earth **38Bobby:** par which parig or **39Host 1:** parig means closest to the geo per **39Host 1:** so that's happening on the 19th **39Host 1:** right closest to the earth pero **39Bobby:** so we're going to get direct information from three atlas on those days and then it's going to travel toward Jupiter and then outside of our galaxy it's actually going straight out it came from the center of our galaxy and he's going outwards **39Host 1:** yeah towards a

spot near Jupiter 39**Bobby**: yeah it's actually going to um Very interesting spot. Yeah, I'll look that up. But it's very interesting where it's headed toward also. 39**Host 1**: Oh, I mean after it passes through our solar system on its way to somewhere else. Yeah. 40**Bobby**: The other interesting piece of information is when it was first observed on July 1st of this year. On July 2nd, we had the largest noted gamma ray burst and it came from the same region, roughly the same region within 7 degrees of where three eye atlas came from. And so this gamma ray burst was actually another galaxy on the the other side of our center of our galaxy, but it came through and it was the largest ever recorded. 40**Bobby**: So this gamma ray burst usually lasts for minutes maybe when we normally see these huge gamma ray bursts, but this one lasted for 7 hours and then the smaller vibrations of it lasted for days and is still animating some kind of a gamma ray to this day. 41**Host 1**: Now, gamma ray bursters are pretty deadly to a planet's health from my understanding. 41**Host 1**: Fortunately, it was from another galaxy. So, 41**Host 1**: yeah, I mean, they're powerful explosion. They can be anyway. The collapse of massive stars. Jeez, what kind of energy does that create? 41**Bobby**: Yeah, 42**Host 1**: they could turn the earth to a cinder if one hit us. 42**Host 1**: Yeah. 42**Host 1**: You think these are the equivalents of like angels trumpeting Like maybe there's an announcement going out to the whole universe that something really special is happening. 42**Bobby**: Yeah. Maybe. Yeah. Maybe they aren't just destructive. Maybe they do a lot of other things 42**Bobby**: besides. 42**Host 1**: Yeah. Synchronistic timing, right? 42**Host 1**: We can't assume we know what's being said. We just notice that it all happened in a big associated clump. 42**Bobby**: Yeah. And there might be information encoded into the signal that we're receiving. So we see a gamma ray burst, but we're also getting a whole bunch of information about the evolution of life. 42**Host 1**: Mhm. Sure. Yeah. Maybe it's uh secretly opening up a whole bunch of third eyes. 43**Bobby**: Oh, what I think is happening is our planet is going through an evolution and a lot of local other solar systems like ours are observing us at this point in time. They're observing us as we go into another level of ascension here. Maybe they're going to greet us galactically as other beings galactically. 43**Host 1**: The disclosure, huh? We're gonna finally allow ourselves to believe that we're not alone in the universe as a unified society with a coherent belief system. 43**Bobby**: Yeah. And I think three eye atlas is not the only messenger. I think there's other messengers coming, but it just happens to be observing us at this moment in time, 44**Host 1**: at this location, at this this close. You stop and think about it. We are receiving light from all over the universe right now through our eyes through our telescopes and and other instruments all the time. And if there's encoded information in starlight, then we're constantly getting galactic information into our neural networks. So why three atlas is so close? Well, I guess it that's part of the mystery. Kind of makes sense that it would be a kind of a download you couldn't do through stars from a distance. Maybe it's a a mass of transfer. It's like a sneaker net with our computers where you carry data from your USB drive to another computer because it's faster than trying to send it over the network. 44**Bobby**: The network is not fast enough for the kind of trans information that needs to be exchanged with our son. 45**Host 1**: Could be galactic sneaker net. 45**Bobby**: Ooh. 45**Bobby**: Yeah. 45**Host 1**: Well, it's kind of fascinating that we're paying this much attention to a light in the sky that is barely discernible with our human eyes, but is very detectable with all the tools that we've developed and that we're using those tools to focus our attention on it. And if we were just humans looking up at the sky a few thousand years ago, we might notice it and a very few people would be noticing it and a very few people would be downloading any kind of a

significant message. 45**Bobby**: Yeah. Well, we have more people today so the message will be amplified. 46**Host 1**: Yeah. 46**Host 1**: Yeah. Attention amplifies, 46**Host 1**: right? 46**Host 1**: It's really amazing some of these amateur astronomers with telescopes that are 8 in and larger in diameter. They are getting best anti-tail and the best actually they have different types of filters so they can see in different frequencies of light. 46**Bobby**: Yeah, they're getting some good stuff. I like Ray's astrophotography on YouTube. Ray's astrophotography. He's got some great pictures of three Atlas and he's got it so that he's tracking it with his telescope and you can just watch it for minutes at a time. It's fascinating what he's posted. 46**Bobby**: If it wasn't for these amateur astronomers, who knows if NASA or European Space Agency would actually reveal what they're seeing because they have to counter these amazing images that these amateur astronomers are coming out with of like why can't we have JWST give us even better images and what are they holding back, you know, 47**Host 1**: especially in the X-ray and in the infrared regions that a lot of these animates are in strong They don't have the instruments for that. 47**Host 1**: So, 47**Host 1**: right. 47**Host 1**: Do you have any favorite channels that you're tracking with this? 47**Bobby**: There's an Indian astronomer. He has some of the best pictures. Of course, Avi Loe is he has access to things that none of us have. And so, his images, especially the X-ray images, are amazing. 48**Host 1**: That's Avi's medium site, which we have a link to on our links page, druturshow.com/links. Check them out. Yeah. Raise astrophotography. R A Ys. Some good stuff lately because it looks like as you're looking at the comet, it looks like there's some kind of vortex around it going around. It's like not just a beam going out like you might imagine for the anti-tail and the tail, but there's something that's rotating around and around the comet as well. Or maybe the comet itself is rotating. If the object, excuse me, it might not be a comet as we know it. It's really interesting. Yeah. So, the citizen science is really coming to bear on this. beautifully. Oh, and in terms of disclosure, I thought it was very interesting that what dropped this week was Steven Spielberg's UFO disclosure day uh teaser. Did you hear about that? 48**Bobby**: No. 49**Host 1**: Yeah. He's coming back to look at the whole Alien Connection contact experience that undoubtedly is coming up here. It's coming in so many different channels now that Spielberg, who really had first brought this up in the 70s with Close Encounters and ET and on and on, he's coming back. for an official film called Disclosure Day. And I thought I'd uh play a moment of that teaser just so you get a sense of it. Yeah. You ready, son? 49**Bobby**: Great. 49**Bobby**: Yeah. 49**Bobby**: Yeah. Ready. 49**Host 1**: Here we go. 49**Host 1**: If you found out we weren't alone, 49**Host 1**: if someone showed you, proved it to you, would that frighten you? 50**Host 1**: Good morning, Kansas City. Let's take a look at today. weather. 50**Host 1**: Let's Let's 50**Host 1**: The weather 50**Host 1**: she's losing it. 50**Host 1**: Is today's 50**Host 1**: Everyone's watching her all over the world. 50**Host 1**: So, yeah, she's she's being possessed by an alien while she's uh on the news. 50**Host 1**: We don't know about being watched by everyone. 50**Host 1**: We don't know what it is, but it's kind of like almost like a possession. 50**Host 1**: Director Steven feel bad. 50**Host 1**: People have a right to know the truth. It belongs to 7 billion people. 50**Host 1**: What is it? 51**Host 1**: You wouldn't believe me if I told you. So, I'm going to show you. 51**Host 1**: What are you going to do? 51**Host 1**: Full disclosure to the whole world all at once. Crop circles. 51**Host 1**: Yeah, full disclosure. 51**Host 1**: People keep wondering, 51**Host 1**: encountering the unknown. 51**Host 1**: They're coming. They're coming. 51**Host 1**: They are starved for the truth. 51**Host 1**: Do you think there could be others? 51**Host 1**: Why would he make such a vast universe? yet save it only for us. 51**Host 1**:

You know, one of the things that got my attention was how there seems to be reconnection with the animals. 51**Bobby**: Mhm. 52**Host 1**: There are scenes where the deer out in the wildest come and start looking in your windows to connect with you. 52**Bobby**: Yeah. Okay. Things like that. 52**Host 1**: That's it. So, our telepathy with animals increases as part of our contact experience. 52**Bobby**: As part of the Spielberg download here. 52**Host 1**: Yeah. And of course, Spielberg has been the sanctioned voice of entertainment media for the ET experience since his movie ET. And 52**Host 1**: yeah, many consider him a scop. 52**Bobby**: Well, he did do the history of the Roswell incident, right? Remember he had that miniseries where we met Professor Hayek and and all of the military project blue book. 52**Host 1**: I don't remember the name of the series, but I remember it was the mainstream history version of what happened at Roswell. 53**Bobby**: Okay. Well, he did War of the Worlds. He did Close Encounters of the Third Kind. ET, the extraterrestrial. 53**Host 1**: These are his movies. 53**Bobby**: Yeah. AI, Artificial Intelligence. He had taken that film over 53**Bobby**: and Ready Player One. That's not really Alien. Those are That's gets more into the AI connection. 53**Host 1**: The AI alien connection, 53**Host 1**: right? I think the worst I've seen with that is the connecting in with the alien internet might actually be doing that. 53**Bobby**: Mhm. 54**Bobby**: So, there's so many plot lines here, I tell you. Where do we start? 54**Host 1**: Not only is the universe stranger than we imagine, stranger than we can imagine. 54**Bobby**: I don't know about that. A pretty fertile imagination. 54**Host 1**: So does Spielberg obviously. And so Disclosure Day is his big big film. 54**Host 1**: All right. 54**Host 1**: Coming Emily Blunt, Josh O' Connor Great. What's the date on the release of that movie? 54**Bobby**: It's supposed to be this summer. 54**Host 1**: Oh, 54**Host 1**: this summer. Universal Pictures. Yeah. 54**Host 1**: So, they have time to put if we have something that happens with Three Eye Atlas. Do you think he might throw some of that in there? 54**Bobby**: Yeah, I would say Spielberg's interested in the real thing. I as much as he is operating with our intelligence agencies, that's okay. I mean, everyone wants to know more than what they have. So, yeah, I think what's going on is bigger than what anyone can imagine. 55**Host 1**: Yeah. I think there's a lot to that. It's not just talking to little gray aliens. So, there's something much more profound happening. I would guess something more on the level where everything is intelligent and the AI help us talk to uh tree entities from all over not just this planet but other planets as well. That intelligence comes in a myriad of forms and we just have not had the context or the consciousness to understand what they're saying to each other or to us. 55**Host 1**: And we will we all reaching that level because it's not necessarily a language as we know language but more of a connection like our connection with nature is the closest we have that we can relate to on that but on a much larger scale something like that that would be my guess so life is pretty amazing here I mean we have um a new type of extreophile that's been discovered a tiny critter that is being called the fire amoeba have you heard about that 56**Bobby**: wow that is Very beautiful graphics illustrating the fire. 56**Host 1**: Yeah, it's a it's part of the Lassen Volcanic National Park, the Cascade Range. 57**Bobby**: It's kind of a hellish underworld there. 57**Host 1**: Pools of boiling water, bubbling mud. 57**Bobby**: Almost nothing can live there. 57**Host 1**: Northern California. 57**Bobby**: Yeah, that's right. 57**Host 1**: That's right. Near Mount Chasta, right? 57**Bobby**: Some of these areas can reach a 464 degree temperature, bubbling mud. 57**Host 1**: It's a little little hot for me. 57**Bobby**: Dangerous. 57**Bobby**: Kill. kill most give you a nice burn. 57**Host 1**: How does its membrane 57**Bobby**: Well, that's a big question, right? That's 57**Host 1**: why does it not melt like we do in 58**Bobby**:

Why don't you melt, don't it 58**Bobby**: in hot tubs, you know, it's like 58**Host 1**: Well, it's a single cell fire amieba. It's gooey gooey looking blow bender little thing under the microscope. It seems to like dividing at 145.4 degrees Fahrenheit. 58**Bobby**: Oh, so that's its happy spot, huh? place. 58**Host 1**: Yeah. That's not boiling water. Oh, 212. 212. 58**Bobby**: Twice as hot as boiling water. 58**Host 1**: No, it isn't. 145 degrees FE, not Celsius. Yeah. 58**Bobby**: 212 is Fahrenheit. No. 58**Host 1**: Okay. I didn't realize you were talking about I thought you said 400. 58**Bobby**: 400. Well, that's how hot it actually gets, but nothing lives in 464°ree mud. 59**Host 1**: Okay. 59**Bobby**: Yeah. That's how fast it hot it gets. Awesome. Right. But there are areas where 145° is considered the perfect temperature for dividing 59**Host 1**: by amoeba. 59**Bobby**: Amiebas. Yeah. Amieba division. 59**Host 1**: Not anybody I know. Even the most dedicated hot tub fans draw the line at around 110. 59**Bobby**: Yeah. And and here they're trying to creatively use Latin to describe it. Incendia moiba cascandenzis which means fire amoeba from the cascades. 59**Host 1**: Okay. Yay. Hey, 60**Bobby**: sounds so much more official in Latin. 60**Host 1**: Yeah. It challenges the notion that organisms called proariots that include bacteria are the only life forms on Earth that can survive extreme temperatures that kill almost everything else. 60**Bobby**: Okay, we have a contender. 60**Host 1**: Yeah, procariots 60**Host 1**: from another class of life. 60**Bobby**: Well, yes, the procarots don't have nuclei. No distinct nuclei. They're the reigning champs of toughness. 60**Host 1**: And do a mea have nuclei? 60**Bobby**: Yes. 60**Host 1**: Okay. So that make them 60**Host 1**: aariats. Aar ukareiots. 60**Bobby**: Oh ukariots. Okay. 61**Bobby**: Ukukariats. 61**Bobby**: Got it. 61**Bobby**: The envy is a ukareot. In contrast to the procariot. Its complex exists in animals and plants and fungi and tiny unicellular life forms called protests. And that includes algae and other amieba. And they're composed of cells that have a distinct nucleus. Yeah, that's a bound by a membrane. 61**Host 1**: So they are they're our relatives. We all have nucleus. Us and those amoeba. 61**Bobby**: Yeah. And typically ukariats like us have an upper temperature limit of 109.4 degrees. 61**Host 1**: Mhm. 62**Host 1**: Above which we die. 62**Bobby**: Yeah. That's what I thought. I I can't get that hot. 62**Bobby**: No. No. 109. Yeah. Yeah. That there were some extreme o ukariats that could go up to 130, 62**Bobby**: maybe 140. But this fire amoeba which is busy dividing at that temperature, that's not even extreme end for it. What did they do? How did they figure out? 62**Host 1**: They just thought it's a spa. For them, it's a little amieba spa. It's like, "Oh, I've been waiting for this hot tub to reproduce." 62**Bobby**: Yeah. Anyway, it's interesting. The temperatures above 158, it goes into dormcancy. That's when it goes into a ball and becomes a little cyst, like a hard shell around it, and it protects it and can survive in hotter weather weather after that. Maybe it would survive in the uh clouds of Venus. 62**Host 1**: Ah well certain clouds of Venus I think there are stratified areas of Venus that where it could I understand that there's a layer in the clouds that you might see on Earth that there's a stratification on Venus that that might be friendly to us. 63**Host 1**: Yeah. 63**Host 1**: So you know that Roswell series I was looking for by Spielberg is called Taken and it came out in 2002. 63**Host 1**: Remember that? 63**Bobby**: No. Yeah, I I didn't see that one. 63**Host 1**: It built upon the so-called Roswell incident, and it covered the lives of three families in the decades between 1944 and 2002, affected by extraterrestrial sightings and the government's coverup operations. So, I remember that. 63**Bobby**: Yeah, you're the only one. 64**Host 1**: Well, 64**Host 1**: well, I'm glad you looked it up. 64**Host 1**: Yeah. 64**Host 1**: Yeah. 64**Host 1**: Starlink has competition 64**Host 1**: with Amazon. Leo. Amazon launched 27 of their internet satellites. 64**Host 1**: They changed the name from Project Kyper to Amazon Leo. 64**Host 1**: We got 7

seconds. **64Host 1:** Hey folks, welcome back to our show. **64Host 1:** Excuse me. **64Bobby:** Yeah, you were a little grally right there. I was doing goats. **64Host 1:** Oh, I see. **64Bobby:** Goats will do that to me. **64Host 1:** That was your goat imitation, huh? **64Bobby:** Affects my voice in strange ways **64Bobby:** because we were talking about the goat academy just before that during the break. **64Host 1:** Yeah. What is it about the goat academy anyway? Should we mention it? **65Bobby:** May as well. You have a link down at the bottom of your list. **65Host 1:** That's true. It's one of our links page. That's true. The goat academy. **65Bobby:** The goat academy is all a Twitter about the crypto reset update and it's happening right now. And **65Host 1:** well, what do you mean? always say it's happening. Is it really happening? **65Bobby:** Well, I listened to it just because I wondered if there was any news and **65Bobby:** the great reset. **65Host 1:** Yes. And what Felix had to say was basically that the Trump administration has ordered the Fed to lower the interest rates even though because the economy is doing so well that could be highly inflationary. And so he thinks that there's going to be a massive transfer of wealth to the asset class of people. And anybody holding cash is going to experience 20% less value after that. So no **65Host 1:** that's a quick summary of what Felix of the Goat Academy has to say about the upcoming crypto reset. **66Host 1:** Now Bobby, what do you have to say about it? It was your link that you sent us. **66Bobby:** Yeah, because he explains how stable coins its function right now and how the \$37 trillion deficit is going to be shifted and reset. And by allowing the whole world to purchase have access to stable coins which in turn they will take that money in whatever currency they have put it into a stable coin and then the bank that runs the stable coin is obligated to buy American debt the 37 trillion. In other words, it can erase our debt by distributing it throughout the world **66Host 1:** pretty quickly too, right? **67Bobby:** Yes. Because it is a crypto currency somewhat. It's controlled by the banks. It is halfway what's CBDC. So, it's not the banks can control the stable coin, but it is distributing the debt. **67Host 1:** Well, the rise of crypto handles the debt. **67Bobby:** Well, it's just shifting dollars into a cryptocurrency. It's actually a stable coin, so it's kind of quasi. It doesn't run on the Bitcoin network. It runs on its own network, but it does allow many different banks around the world to issue their own coin, but they are obligated to take that money in whatever currency they have and convert it and buy these treasury bonds. **67Host 1:** How does it affect investment strategies? **68Bobby:** What's going to happen is there's going to be a big vacuum of all these fiat currencies around the world and they're going to be funneled into these stable coins and then these are going to be the launch pad for where you can actually purchase Bitcoin or Ethereum or some of these other altcoins and you can jump from one network to another. What we're seeing is a lot of the debt is being transferred and it's being evaporated and there's a big shift where money as you know it is very different. It's going to become very could be the transition from scarcity to a abundant u economy early days of something like that. **68Host 1:** Yes, it can be that too. It's important to be aware of what this is happening because in this next year things are going to get switched to digital money. **69Host 1:** The problem is if you hold on to cash and you have coins or paper money every day that goes on the value of that money because they're going to print fiat currency value becomes worthless and asset value like stock markets and real estate becomes extremely more valuable even though nothing has changed. It's easier to pay down debt. So people who have a lot of debt benefit because the debt that bought a lot of stuff when they acquired the debt can be paid now with dollars that have been diluted **69Bobby:** in inflated dollars. Yeah. So so dollars that are worth less. **70Host 1:** Yeah.

70Host 1: So it might be a good time to borrow money because you're going to pay back the money with dollars that are not the same value as the time that you borrowed the money.

70Bobby: Well, that's why they're lowering the interest rates. So, that typically benefits people who want to borrow money, right?

70Host 1: Yeah. So, there's an increase what they call liquidity so that it's much easier for companies and banks to borrow money, just print money. So, we had this in 2021, I think during co they started printing money

70Host 1: because nobody was working, right? The **71Host 1:** Oh, and it's crazy. I don't even recognize the economy right now. Any kind of grace that people felt about their savings has just evaporated and it's really becoming very difficult for people to keep up with the inflated values.

71Bobby: That's right. So, what Felix is recommending is either real estate, gold or silver, Bitcoin. So, those are the hard assets that will will appreciate over this time as opposed to fiat money that could depreciate in value.

71Host 1: Okay. **71Bobby:** Yeah. **72Host 1:** Thanks, Bobby. We'll keep an eye on that. Move all our Bitcoin to gold, son. Quick. Just kidding. **72Bobby:** I would do the opposite.

72Host 1: The opposite, huh? You saw your goal for Bitcoin? **72Bobby:** Yes. Because Bitcoin is at the lowest you're going to see it right now. **72Host 1:** Oh, what's it at now? **72Bobby:** In the 80. It had gone to 85 actually. Maybe yesterday. **72Host 1:** Oh, well that's pretty low. **72Host 1:**

That's what it was about a year ago, wasn't it? **72Bobby:** Yeah. No. Well, it went up to 120, right? It was last year. **72Bobby:** It's gone. It went from 80s up to 126 and then back down to 85 again. **72Host 1:** How long was it 126 for? **73Bobby:** Several days. It was up in the 20s for maybe a week or so. **73Bobby:** All you have to do is look at Visa or Mastercard. They've actually left the Swift network and they found that blockchains like even XRP or the Lightning network off of Bitcoin. These things cost pennies to do the transfer of your credit card information across the world. While traditionally the Swiss system would take a certain percentage of it, like a couple percent. **73Host 1:** Yeah. Between 1 and a half and 3%.

73Bobby: Yes. **73Host 1:** So now the banks realize there's a cheaper way to transfer money and it's all digital. So you might not notice it on your credit cards, but it's happening already. What you're going to notice is a lot of restaurants and stuff might not accept certain kinds of credit cards, especially the ones that have the high perks where they give you 3% or 4% back when you go to a certain restaurant or if you buy gasoline. Those those kind of cards are going to go. They're not going to accept. **74Bobby:** They said, "Yeah, they still won't take Discover."

74Host 1: Now, we actually just recently went through a phase of getting rid of all of our low utility credit cards because they all seem to be be funded by the same organization. Like I think Chase and City Bank had were basically the credit cards that were posing as Best Buy and Costco and United Airlines and I'm sure you could come up with a list of dozens of vendors that had branded their credit cards and they all were going back to these same credit card networks and it just seemed silly to have so many cards going back to the same credit company. So we consolidated and got down to just couple cards that we use all the time. **75Bobby:** Yeah, that's that's good. **76Host 1:** I wanted to mention that you have the state of the world forum is going on that this used to be a big event in the '90s that really got our attention with **76Bobby:** Oh yeah. Henry Dacon was one of the big supporters San Francisco global leaders visionaries

76Host 1: and we were very involved with 3220 his community outreach facility networking resources, conversations that supposed to transform the world. All these people coming from all over the world to help make it happen. **76Bobby:** Very high-minded, idealistic, inclusive, progressive, liberal people, really optimistic for the future, **76Host 1:** including Dr. Abby Loe.

77Bobby: Yeah. Right. **77Host 1:** Right. **77Host 1:** And it started out as the Gorbach Institute coming to San Francisco. **77Bobby:** Well, now he was a guy that came to it. **77Bobby:** He was involved with the beginning of the World Economic Forum **77Host 1:** because he was at the procedio originally in San Francisco and so they brought it to **77Bobby:** right with the bioners and all those guys. **77Host 1:** Yeah. So anyway, Jim Garrison has been front and center bringing together the talent and Lynn Twist of course these are **77Bobby:** Bay Area luminaries. We're all very familiar with these guys. **77Host 1:** Yes. Also Dr. Rubert Sheldrake the biologist and consciousness researcher. **78Bobby:** He was speaking there this year. **78Host 1:** Yes. Vladimir Pausner, **78Host 1:** French Russian American journalist. You might have recognized him from his comments. He was quite well known in his interpretation of East West relationships back in the '90s. **78Bobby:** So, a lot of these people have a little bit of history with the whole collapse of the Soviet Union in the 1990s. And **78Bobby:** yeah, **78Bobby:** and it's significant. **78Host 1:** Yeah. This organization emerged just after the collapse of the Soviet Union and now it's been given all kinds of nefarious attributes. There's a lot of people who think that the world economic form which did come **78Bobby:** state is different. There's the world economic and the state of the world forum. There's two different organizations, **79Host 1:** right? The state of the world forum is a very highminded, optimistic organization and the world economic forum has become a bit more **79Bobby:** well that's more shady, don't you think? **79Host 1:** A collection of power brokers, right? **79Bobby:** Ross Colart is one of the speakers and he's one of the big researchers in UFO thing too. Here, let me give a minute of him so you can get into he's going to talk about this **79Ross Colart (SOWF Speaker):** the state of the world forum. which is being held online hosted by my friend Jim Garrison and myself on the period 14th to the 17th of December this year. Uh what is the state of the world forum? Well, Jim Garrison is an amazing guy. He uh worked for a long time with the new paradigm institute with Danny Sheen and he's moved very much more assertively into consciousness studies. Uh Jim wouldn't mind me saying he's a bit of an old hippie and at the end of the cold war he did something quite miraculous between 1995 and 2000 he started up this thing called the state of the world forum where he got Mikail Gorbachef the president of Russia and uh Secretary of State James Baker um the Indian national congress president Sonia Gandhi the pimeatlogist Jane Goodall noble laureates South African president Thabber and Becky and an array of people to come and speak at a forum that discussed the state of the world at the end of the cold war and what possibility there might be for peace in the world in the emerging world order. And 20 years on, Jim's decided to do it again. And I'm very privileged to be involved in this on December the 14th. And just to repeat the link, it's www.stateoftheorld.forum on the 14th to the 17th of December. And it's centering around four consequential truths accelerating planetary ecological collapse, increasing global and social instability. Are we going to war? Is World War II imminent? Exponential AI. Are the computers going to kill us? And my personal favorite and obsession, cosmic intelligences are present on Earth. It's the first time that disclosure is going to be integrated into a major conference with other world issues and we're running multiple forums high lighting the latest for example three eye atlas with professor Avi lobe UFOs and nukes with Dr. Beatatric Villerol my favorite astrophysicist and the interface between AI and non-human intelligence with Pipper Mgrren and numerous other speakers speaking about consciousness and how we can achieve world peace. **80Host 1:** There you go. **81Bobby:** Yeah, it's very heady and it's accessible through Zoom and It's free by donation, I guess. **81Host 1:** There is free stuff on YouTube.

81**Bobby**: Yes. It's very interesting, jam-packed with brilliant people with interesting things to say. 81**Host 1**: Wow. It's actually online. Is it is this what you're saying? 81**Bobby**: Yeah. Yeah. Okay. It's an online event December 14th through 17th going on right now. 81**Host 1**: And you go to stateoftheorld.forum. Stateoftheorld. 81**Bobby**: Fo. And we watched the opening ceremony from the 14th. 81**Host 1**: That's on YouTube. It pretty much it was a council of grandmothers and it was a lot of people who had prayers and historical information and prophetic information for this time of history. It brings together the elders and the youth. We had people who are pretty much impugning the colonial era and the exploitation of humanity for the benefit of the few. That's definitely Certainly one of the cries that has been underlined in this forum. 81**Bobby**: Yeah. Ecological wisdom and human preference in the drive for AI 82**Bobby**: technology and things like that. They're all being discussed 82**Host 1**: in the state of the world forum that I was at in 95. I believe it was 82**Host 1**: that was it heyday. 82**Bobby**: I did meet this Zen Buddhist monk from Vietnam. Ticknot Han. 82**Host 1**: Oh yeah. Ticknot. 82**Bobby**: And that transformed my life there at the Fairmont Hotel. Yeah. 82**Host 1**: And they had it there and I remember seeing both of you there. 82**Bobby**: Yeah, we were there. We were We were 82**Host 1**: Yeah. That was part of our DNA. 82**Bobby**: Part of that. 83**Host 1**: Definitely. 83**Host 1**: Yeah. Yeah. We were pretty close with Henry Day. Connected through that. 83**Bobby**: Yeah. 83**Host 1**: Circuit, if you will. 83**Bobby**: Yeah. I had a marvelous connection at that time with Jean Houston. The only time that I personally got to meet her. 83**Host 1**: It was a such a collection of brilliant, creative people. 83**Bobby**: Yeah. Gene Houston was involved with the one of the first interactive video games that used galvanic skin response bio feedback, 83**Host 1**: right? The wild divine game. 83**Bobby**: That's right. 83**Host 1**: I don't think it has been matched in terms of a interactive bio feedback game. 83**Bobby**: It's coming. It's coming. It'll be a point where we go into virtual worlds and they're interactive with our biology with how we're feeling and sensing the world. 84**Host 1**: Sure. But I'm just saying I loved that game. The reason why it comes up in the context of Gene Houston is because She was a guest artist who gave an introduction to the world that you explored as part of that game. It was a very fascinating game that tried to teach people beautiful concepts like ways to meditate, deep breathing, learning different breath techniques to interact with the technology. And if you learn to do the breath of fire, then you would have the experience of lighting a fire in a room. It was just a really remarkable up lifting game with beautiful graphics. 84**Bobby**: She's quite the amazing lady. 85**Host 1**: Yeah. 85**Bobby**: In terms of archetypes and wanted to teach us. 85**Host 1**: She was the hostess who welcomed people when they arrived. 85**Host 1**: So, yeah, coming right up. So, check it out. It's online. You guys can check it out there at stateoftheorld.forum. 85**Bobby**: Yeah. Thank you. I'm going to check that out for sure. 85**Host 1**: Okay. Great. 85**Host 1**: This kimchi breakthrough. 85**Host 1**: Oh, okay. All right, 85**Host 1**: there you guys. You guys have a lot to say about kimchi. Yeah, this is up your alley, Bobby. You know how to digest this concept. 85**Host 1**: I know, Bobby, you've always eaten kimchi, but apparently some new studies show that it alters immune cell behavior. 86**Bobby**: Yeah, it does trigger your tea cells and trains them so that it can differentiate between good and bad viruses and bacterium. 86**Host 1**: Well, I guess anything that can survive the red hot peppers would have respect for, right? 86**Bobby**: It's based on cabbage and cabbage naturally has these probiotic bacterium. So that's why sauerkraut is very important. It actually promotes vitamin K2 and it promotes a lot of good things happening in the body. It works in tandem with vitamin D and promoting your health. 86**Host 1**:

Oh, they say that the World Institute of Kimchi, you know, in the Ministry of Science and in South Korea. **87Host 1:** Yeah. **87Host 1:** They're finding that kimchi can curb excessive immune reactions while at the same time strengthening body's defense responses. **87Host 1:** So it's really looking at the immunological effects at the single cell level and demonstrate its benefits beyond the metabolic health. **87Host 1:** So excessive immune reactions would be like hypo sensitivity. So if you get an antihistamine response like asthma is an a hypoimmune response to an allergy. where your own immune system chokes your lungs by creating too many antibodies **87Bobby:** histamines. Yeah, it creates histamines and overreaction. So that reminds me that there's something also there's a lactobacilia sea which actually lives in the sinuses of people and the people that don't have that then they have larger reactions to hay fever and asthma and those kind of things. So there Our specific lactobacillus is sakai that you can actually buy online. It's a spray bottle in your nose and sometimes that can remove a lot of the symptoms of hay fever and certain kinds of allergies in the nasal system. **88Host 1:** Wow. So it doesn't just stimulate the immune system but acts as a precision regulator that enhances the defense capabilities of the immune system when necessary and suppresses unnecessary and excessive responses. **89Bobby:** Am I regulatory mean ism of kimchi. **89Host 1:** All right. **89Host 1:** Yeah. So, there's a woman Ray Blau. She's Canadian **89Host 1:** and she's a researcher on sauerkraut. The same basilluses that are in kimchi are also in sauerkraut. And she promotes sauerkraut. And there's certain kinds of cheeses in in Europe. **89Host 1:** So, kimchi is eastern sauerkraut essentially. Exactly. Kind of dish. That's what it is. Just like sauerkraut is cabbage, right? **89Bobby:** So, they're both cabbage. **90Host 1:** Yes. **90Host 1:** What are the ingredients? in kimchi besides cabbage and red pepper, **90Bobby:** a certain amount of salt. It's in a brine and you let it ferment for months. You know, when you first buy a kimchi jar, when you first open it, sometimes they explode because there's so much fermentation. **90Host 1:** Fermentation, right, **90Host 1:** going on inside there, **90Host 1:** right? **90Host 1:** Do you have it regularly yourself? **90Bobby:** I try to eat it maybe once a week if I can. My mother always told me, "Yeah, it's good. You should take it at least once a week." **90Host 1:** Yeah. In Korea, they eat it a lot more often than in Japan, but in Japan, they do eat it **91Host 1:** once a week. Can you put it on a hot dog? **91Bobby:** People do. **91Host 1:** Cabbage hot dogs. That's **91Host 1:** You know, you ever had hot dogs with sauerkraut? It's the same idea. It's the same thing. You know, you're getting hot dogs. **91Bobby:** Yeah. Okay. Well, I'll keep that in mind. **91Host 1:** All right. So, there you go. **91Host 1:** Simi breakthrough. Powerful immune boosting effects. **91Host 1:** All right. Go to a break. I'll be right back. **91Host 1:** Stand by. **91ADVERTISEMENT SPEAKER (Knox Roofing Speaker 1, Warren):** Hey Warren, you know it's been a while since I've been up to your showroom and garden center in Scots Valley. Maybe the folks out there might want to know where you are. **91ADVERTISEMENT SPEAKER (Knox Roofing Speaker 2):** Absolutely. To find Knox Roofing and the Knox Garden Box Company, just head up into beautiful Scots Valley. We're off of Highway 17 with only two X's to choose from. We're at 46 El Pleblo. road next door to Scarboro Lumber and the beautiful nursery. We have a great showroom displaying all the many choices in roofing from tile, composition, steel, flat systems in many styles and now solar. And when it comes to wood items, we have it's all about wood gift shop and of course the Knox Garden Box. What's a Knox box? Lots to look at. And while you're in Scots Valley, check out the town. There's nice restaurants, breweries, wineries, shopping, hotels, farmers markets, and the entrance to the beautiful redwoods. Okay, folks. As always, we appreciate all of you out

there. We'd love to see you at Knox Roofing and the Knox Garden Box Store. And we can also come see you as well. Okay, thanks folks. 91**ADVERTISEMENT SPEAKER (Hook Outlet):** Get hooked up with affordable cannabis at your locally owned Hook Outlet where everybody above the age of 21 can participate in the Hook's loyalty program. Each purchase earns you 2% store credit on your next purchase. Get hooked up with the best cannabis at affordable prices at the Hookoutlet in Capola and Watsonville or order online at hookoutlet.com. Get hooked up at the hook. 92**ADVERTISEMENT SPEAKER (Reagan Gold):** Attention investors. This is a simple commercial on the investment value of gold. Gold continues to make new highs. In good markets and in bad markets, you need to have your portfolio balanced with gold. Learn about owning physical gold or getting a goldbacked IRA. Make this simple call right now. 92**ADVERTISEMENT SPEAKER (Reagan Gold):** 800414 41657 8004141657 That's 800414-1657 sponsored by Reagan Gold. 93**Host 1:** Okay, I wanted to tune you into one of our little media experiments. Last week's show, I did a little experiment where I put it to some visuals and did a video version of it to see how how it would look. If you want to know what the likes of us actually look like, what we're talking about, we have some 93**Bobby:** casting live from our studio. 93**Host 1:** We did a little did a little experiment there and it's at dr.futureshow.com and take a look at that. It says video version. Just click on that and off you go. 93**Host 1:** Okay. 94**Host 1:** Okay. I think it's on our Podbean account. 94**Bobby:** There you go. We'll upgrade our show. 94**Host 1:** Yeah, that was great. 94**Host 1:** Did you enjoy that, Bobby? 94**Bobby:** I did immensely. Yeah. 94**Host 1:** Yeah. You're quite prominent on the left. side of the screen on that one. There was 94**Bobby:** um I didn't know that we were going to use this for recording. So, 94**Host 1:** neither did we. 94**Host 1:** Yeah, we didn't know either. It was an experiment and and we're not going to do it every week. We just wanted to to see if it could be an engaging. 94**Bobby:** Yeah, we thought it was a really good show and we thought, "What the heck? Let's put it out in another medium." 94**Host 1:** Yeah. I even had special effects for Aura, you know, when she 95**Bobby:** has become a colored wave of sound. 95**Host 1:** Yeah. Where she's saying things. 95**Bobby:** Big bypass on state control for sure. 95**Host 1:** You see? And what are all the different podcasts and streams that people can listen to the show on right now presently? 95**Host 1:** Oh, 95**Host 1:** you can search for Dr. Future and iTunes and you'll find us there. 95**Host 1:** Just do us a Google search on that. 95**Host 1:** Podbean is futur.podbean.com. futurenowshow.podbean.com that has nice visuals of each show. You can see and I also put the video up there 95**Host 1:** too. So if you But I do think that we have created the show in the context of theater of the mind. So mostly this show is theater of the mind where we get you to imagine these things and occasionally we'll even bring in a um ability for the outside those of you out there listening to talk to us 96**Bobby:** every now and then the phone lines 96**Host 1:** just doesn't work as well as I'd like it to. 96**Bobby:** Well, it's a little unpredictable. 96**Host 1:** Yeah. 96**Host 1:** Yeah. But any event, we do have so many stories to share with you every week as we approach what some call the Singularity are worthy of our attention. 96**Bobby:** Yes, the singularity. 97**Host 1:** For example, you know that uh Starlink is vying to give you uh easy access to the internet anywhere in the world for \$40 a month ultimately directly to your phone. It's just about complete in their network. And as they're completing on theirs, another network is gearing up. One that's called LEO LEO. 97**Bobby:** Lower Earth orbit. 97**Host 1:** Yeah, Lower Earth orbit. And it's being financed by Amazon. and Jeff Bezos. They had a United Launch Alliance Atlas 5 just carry 27 Amazon LEO spacecraft up out of Florida, the Cape Canaveral

there today, early this morning. 97**Bobby**: Okay. Bezos is in the race. 98**Host 1**: Yeah. And their network will consist of about 3,200 satellites. Not as many as 98**Bobby**: 3200. They're going to stop at 3,200, huh? 98**Host 1**: Yeah. 98**Host 1**: Yeah. I think Starlink is aiming for tens of thousands, I think. 98**Bobby**: No. Well, they're happy with 11,000. 500 I think initially. 98**Host 1**: Yeah, 98**Host 1**: that's what they have permission for 98**Host 1**: from the regulating agencies. The LEO network now is going to require 80 launches to get up to speed and compete with Starlink to any great extent and they are using all the different launch services. I mean almost everything everything that Starlink has done has gone through 98**Host 1**: SpaceX. Right. Right. 99**Bobby**: Which of course is responsible for 75 80% of everything that's ever been launched into space. 99**Host 1**: Just fine for But what they're doing here is that they're leasing out different rocket launch groups from United Launch Alliance to Arion Space, that's the European French launch facilities and SpaceX. SpaceX has actually launched some of the LEO satellites, their competition. 99**Bobby**: Pretty cool, huh? 99**Bobby**: So, 99**Bobby**: yeah, 99**Host 1**: as Blue Origin develops the new Glenn, they'll use that more and more. That's their own spaceship. Probably a better cost ratio for them to use. use their own spaceship 99**Bobby**: as long as it doesn't blow up. 100**Host 1**: Yeah, as long as And they've been working well. Glenn has been working quite well. They even landed the booster. Also, um, worthy of note, got my attention was an MIT news piece about how vision can be rebooted in adults with what's called amilopia. And that's kind of a lazy eye, ambotic eye, 100**Host 1**: that temporarily anesthetizing the retina briefly reverts the activity of the visual system to that observed in earlier development. it. It's kind of like rebooting your computer to get rid of your problems. 100**Bobby**: That biology has a reboot component to it that gives us an ability to reboot. Certain subsystems of our biology that that seem to correct impairments. 101**Host 1**: Okay. So, the impairment is that somehow your retina isn't working which is the retina. The retina is the image on the back of the eye. Light comes in and gets inverted at the lens and then it's projected on the back of the eye. That's the retina. That's the retina in the back. Yes. So, what it's doing is it's getting all the cones and the rods to start a reboot and just start to come on all together in synchrony. 101**Host 1**: Yeah. 102**Host 1**: The lab of Pikau Professor Mark Bear and collaborators showed that anesthetizing the non-amblionic eye, non-amblopic eye can improve. 102**Host 1**: So, that just means it's like closing one eye to make the other one stronger. 102**Bobby**: Yeah. Okay. 102**Host 1**: And they've been replicated and so that they have new evidence that shows that the new treatment could be effective when applied directly to the ambopic eye. 102**Bobby**: Okay. So, 102**Bobby**: it's just resetting 102**Host 1**: anesthetizing it. Pretty step forward. 102**Bobby**: All right. In either case, it's somehow creating conditions where the eye tries a little harder. 102**Host 1**: It does. Yeah. It seems to try a little higher when it's rebooted, when it's 103**Host 1**: it's kind of like Sun's idea of uh covering up the good eye so that your focusing more on your back 103**Bobby**: weak one. Yeah. 103**Host 1**: Yeah. The weak one. 103**Host 1**: Yeah. Doing a little therapy for the weak eye. 103**Bobby**: So that's what it looks like it's doing. And then it's resetting your brain to accept this weak information that it was ignoring before. 103**Host 1**: Mhm. 103**Host 1**: Yeah. Yeah. They found that that blocking inputs from a retina to neurons cause neurons to fire bursts of electrical signals to downstream neurons in the visual cortex. And the similar patterns seem to occur in the visual system earlier on even before birth and these guide the synaptic development and they're thinking that these bursts might have a role in in the ambionic treatments that were going on. So they injected tetrodotoxin TTX to anestize the retinas in lab

animals and they found that bursting occurred not only in those LGN neurons that received input from the anesthetized eye but also in the LGN neurons that received input from the unaffected eye. They identify the genetic channels that seem to disrupt the bursting. 103**Bobby**: Well, it sounds like they broke it to fix it. 104**Host 1**: Yeah, they break it to It's like you turn things off to turn them on. 104**Bobby**: Yeah, but they're anestheticizing the eye and that's somehow bursting some of the brain tissue 104**Host 1**: that's giving you a clean slate to rewrite the communication that's going on between the eye and the brain. Definitely is kind of like wiping it clean and then rebuilding it. Very risky. 104**Bobby**: Well, it sounds like your brain was treating the weak eye is like noise and then when you anesthetize it and it says there's nothing there and then you close your good eye and then you start looking at properties wear off I think your brain will start looking at what information it is and not looking at it as noise but 104**Bobby**: yeah 105**Bobby**: uh as clean information 105**Host 1**: makes sense it makes sense instead of having a blockage you act as if there's nothing there and so you see what you can do 105**Bobby**: yeah let's go We'll keep an eye on this. It's pretty interesting. I wonder if there's an equivalent in terms of ears. Like I'm noticing for example more background sound like tonitis. 105**Host 1**: Titus. I I was just going to say about three Atlas. I'm getting more tenitis. 105**Bobby**: Are you? 105**Host 1**: Sounds. Yeah. I woke up yesterday and it was like the worst tenitus I've ever had. 105**Bobby**: Yeah. I'm experiencing more of that too. 106**Host 1**: How's your hydration levels, my friend? Just curious. 106**Bobby**: I was hydrating a lot. 106**Host 1**: You're hydrating a lot. Okay. Yeah, that's good. 106**Bobby**: And I was like cleaning my ears. 106**Bobby**: Just gets louder. I don't, you know, it's bizarre. 106**Bobby**: I thought maybe I'm also electro sensitive to like 5G frequencies. 5 GHz. I mean, not 5G, but 5 GHz. So, I thought maybe that's it. So, I was turning off all my Wi-Fi and make sure it's plugged in directly, and it didn't make any difference. So, I don't know if it's threei Atlas. I don't know if it's my Wi-Fi. I don't know. But, uh, it It was profound yesterday. It was pronounced. 106**Host 1**: Did you discern any signal in it at all or 107**Bobby**: No, it was just a very loud 107**Bobby**: lot of noise. 107**Host 1**: Yeah. High frequency pitch that I was picking up. 107**Host 1**: Getting more noise. And how do we get more signal? 107**Bobby**: That's your job. Figure that one out. 107**Host 1**: Well, according to chaos theory, the signal lies in the noise. 107**Bobby**: Well, if it's signal, it's not noise. 107**Host 1**: Well, in the classic sense, 107**Host 1**: we're looking for a pattern here. 107**Host 1**: We're trying to apply go through the and that's where you look for patterns where there aren't any observable ones where you can't see any. Anyway, 107**Host 1**: there was an interesting strange patterns they were finding down in South Brazil in northern Argentina. Remember there's another piece we have from earth.com 108**Host 1**: and deep under the hills up there appeared to be these huge tunnels that cut right through solid rock and the scientists couldn't figure out how they were created. They don't seem to be related to any normal geological pro process or no human creating tunnels for mining or anything. And they didn't seem to follow any river channels. They didn't look like normal caves. 108**Host 1**: They were at least 600 yards long, tall enough for an adult to walk through without bending. And they finally figured it out. 109**Bobby**: Okay. 109**Host 1**: Detailed map of 1500 of these things, giant tunnels. They branched into side rooms. They had whole complex structure. Well, according to their research, now they now believe that these were created by giant Giant extinct ground sloths. 109**Bobby**: Ooh. Oh, really? These were dug by animals? 109**Host 1**: Yes. 109**Bobby**: Oh, giant giant extinct ground sloths make these colossal shelters. 109**Bobby**: They have to be gigantic. 109**Host 1**: Huge. 110**Bobby**: Yeah, 110**Bobby**: sloths. 110**Host 1**:

Maze of underground homes. 110**Host 1**: That really changes my perception of sloths. I didn't think they accomplished. 110**Bobby**: Underground ground sloth. It probably took them a whole lifetime to make their home. 110**Host 1**: Probably more than one, it sounds like. 110**Host 1**: And then they reshaped landscape. It's a sloth civilization. 110**Bobby**: Yeah. 110**Bobby**: Wow. 110**Host 1**: Um they appear in consolidated sandstone, weathered volcanic rock. They're hard for machines to excavate and harder for humans. They were simple tools. Some of old tunnels were reused over and over. Some kind of a map of ancient tunnels. It was called the Cenozoic period 110**Host 1**: when these tunnels were made. 111**Host 1**: Fascinating, huh? 111**Bobby**: Yeah. 111**Bobby**: When we were in Costa Rica, they have these sloths. They just they're very large, but they move so slow. They don't smell good, but 111**Host 1**: Yeah. You got that close, did you? 111**Bobby**: But but they look very cuddly. 111**Host 1**: Yeah. Well, imagine them as being giant. And 111**Host 1**: yeah, apparently the reason why they attributed these tunnels to giant sloths is because they found some giant sloth skeletons in the caves there. 111**Bobby**: That's right. They they matched burrow size and claw patterns with fossil skeletons. And six foot 6' 1.8 m across and about as tall. That was circular. Wow. You know 111**Host 1**: that's big. 112**Bobby**: Yeah. 112**Bobby**: But they move so slow. How can they dig into the rock? I just can't imagine they could do that. 112**Host 1**: Well, you know how people escape from prison using a spoon, you know, through the lawn. Takes a long time. Takes a long time. But they have claws. 112**Bobby**: They do. 112**Host 1**: Yeah. They have big long curved claws. 112**Bobby**: Yeah. They think that's how they did it. Their claw. I can't imagine they were using any kind of liquid that would dissolve the rock like a snail. Giant snails might make holes like that. 112**Host 1**: But it would take a lot of fluid, it seemed to me. 113**Host 1**: I guess if it's sandstone, you could go reasonably fast with it. 113**Host 1**: I suspect that these were created by something other than a sloth, and the sloth found them as as a good home and they died in them. 113**Bobby**: Okay. 113**Host 1**: A sloth built as they were with a long tail for balance and massive fourlimbs tipped with curved claws. Well, these built like that could rear up, brace, and dig steadily into sediment or softer rock over many generations. 113**Bobby**: Yeah, that's what makes sense to me. 113**Host 1**: Yeah. Many generations. 114**Bobby**: Yeah. It's a sloth colony. 114**Host 1**: And they go all the way back to the Pleistocene ice age period ending 11,700 years ago. Not that long ago, right? Humans were around. Humans and sloths shared the Americas together 114**Host 1**: at that time. So, there should be some. 114**Bobby**: We were shorter then. It sounds like they were big. There should be some ancient natives tales about giant sloths then. Eh, 114**Host 1**: sure. Yeah. Doesn't it look like graffiti on the inside of these caves, though? 114**Bobby**: Well, there's humans, too. And New Mexico's White Sands, there's a footprint papered that has trackways where barefoot humans stepped into sloth prints and then followed them for long distances. 114**Host 1**: So, human interactions with sloths were mostly interpreted by the scientists as stalking or hunting behavior. 115**Bobby**: I guess Would we eat them or they would eat us? No, they'd never catch us, right? Sloths killed by a sloth. 115**Host 1**: I don't know. Maybe we had harmonious relationships with them, 115**Host 1**: maybe. 115**Bobby**: Well, they said they could rear up and lash out with their claws. 115**Host 1**: Slowly 115**Bobby**: a lethal reach. Close quarter would not be good, 115**Host 1**: especially not in those caves. 115**Host 1**: Dangerous animals. Dangerous. Yeah. 115**Bobby**: But it's possible that we hunted them. Mhm. 115**Host 1**: They were tasty. I don't know. I've never tried sloth. 116**Host 1**: And it seems like these underground burrows would help them avoid people that go into their caves and avoid

having to deal with us big cats, humans, and temperature swings on the outside because it was cold outside the end of the ice age. 116**Host 1**: Fascinating, huh? 116**Bobby**: Yeah. Very. 116**Host 1**: So, let's see. It looks to me like you have one article left. which is strangely enough about a frozen creature. 116**Bobby**: Yeah. 116**Host 1**: After the ice age, it comes back to life after 46,000 years. 116**Bobby**: Yeah. Yeah. That was a tiny creature by Right. This is a real science fiction movie here also. 117**Host 1**: Uhhuh. 117**Host 1**: What do you do when the ice starts to melt up north and the permafrost starts going away and microscopic organisms in the ice start to become alive again? 117**Bobby**: Yeah. 117**Bobby**: Right. This is a nematode. right out of an alien movie. 117**Host 1**: Yeah, they look really strange. 117**Bobby**: Yeah, 117**Bobby**: in the permafrost of Siberia. 117**Bobby**: Yeah, they can deal with those cold temperatures. How do they survive with that kind of temperature? I think is part of the mystery. The nematode. 117**Host 1**: You think it slept for 46,000 years? 118**Bobby**: Well, I think it's probably a form of hibernation. They say that if a animal is truly frozen and they have much water in their system, then the water when it freezes, it expands. creates these little crystals that penetrate cell walls thereby destroying the viability of cellular structures. Cellular intelligence gets destroyed. So how do they avoid that for how do they survive extreme temperatures? 118**Host 1**: So the thing is that these are fossils. I don't think they've discovered any living worms. What they've got is a new species that has been radiocarbonated to the pleistocene era. 118**Host 1**: So 119**Host 1**: I don't know. Oh, I know. It says, "In laboratory experiments, the worm demonstrated molecular mechanisms 119**Bobby**: survive. You're right." 119**Host 1**: Yeah, it's alive. It's not just fossils. Here we're talking 119**Bobby**: living organisms. 119**Bobby**: Reanimated. 119**Host 1**: Reanimator. That's right. That was a famous movie made here in Santa Cruz. 119**Host 1**: Look at this. Its genetic mechanisms may hold clues for organ preservation, biomedical science, and deep space survival. 119**Bobby**: Deep space exploration. 119**Host 1**: Yeah. 119**Host 1**: Yeah. Yeah. Yeah. 119**Host 1**: So, permafrost is the future. 119**Bobby**: Well, deep space. 120**Bobby**: Cryptobiotic capabilities. 120**Host 1**: Yes. Cryptobiotic capabilities of nematodes, right? 120**Bobby**: Yeah. 120**Bobby**: It makes me think of the sci-fi book Dune, 120**Bobby**: right? Because in Dune, the children of Dune basically covered themselves with worm slime, which looks like these nematodes, and then it bonded with their skin and made them immortal. 120**Bobby**: So, what are the immortal biochemical strategies that they use to allow them to have chryso preservation where they can survive freezing without penetrating the cell walls. 120**Host 1**: Good question. 121**Bobby**: There's alor in Arizona. 121**Host 1**: Yes, that's for humans. 121**Bobby**: The human freezer people. 121**Host 1**: Yes. So, I think they would be all over this. It seems like there usually there's some kind of sugar that keeps as an antifreeze. You know, 121**Bobby**: I suspect there's something sugar oriented in this. 121**Host 1**: Well, yeah. In other words, it's not really from the glyco. 121**Bobby**: Yeah. Well, that's what they use. They use it like an antifreeze instead of 121**Host 1**: antifreeze. 121**Host 1**: Now, if they were possibly secreting some kind of fluid that had a lower freezing point than water or something that added to their water in their system that would make it a lower temperature like antifreeze. That could work. 121**Bobby**: Give them a few degrees. 122**Bobby**: And I think that's all they need in these environments. They freeze at 32 degrees 0 centigrade. So, if they survive another two degrees below that then that would be good. 122**Host 1**: Hey, you know what? This show is just about over. 122**Host 1**: I don't know. What time is it? It's towards the end. 122**Host 1**: We got uh 20 seconds. 122**Bobby**: 20 seconds. Okay. Well, thanks for listening everyone. Appreciate your

attention. Happy holidays. Hope that you're enjoying Christmas and New Year's and Hanukkah
122**Host 1:** and the state of the world forum and Atlas 122**Host 1:** December 19th. Happy
birthday, brother. 123**Host 1:** Now, 123**Bobby:** yes. 123**Host 1:** All right. Good night, everyone.
Bye. 123**Bobby:** All right. There we go. 123