Maggie Zhao

APCS1 -- pd2

HW39 -- deepening appreciation of progress/enlightenment through science

2017-11-27 M

Response to

Episode 1 - "Standing Up in the Milky Way"

@-------------------------------------------------

- It is crucial to take action and control your life, not let it slip past your

 fingers. Neil deGrasse Tyson explains the steps as: i. testing ideas by experiments and observations; ii. building ideas that pass the test and rejecting those that fail; and iii. questioning everything. By accepting these terms, "the cosmos is yours."

- We are but a small part of the universe, a tiny speck of dust in the great cosmos.

- If rogue planets are only visible in infra-red light, is there the possibility of life similar to ours, that utilizes only IR light? Does it exist on our own planet? Would they be able to function similarly to us? How many ways of being alive are there?

- They say that in a few billion years, the Andromeda galaxy will collide with

the Milky Way galaxy, and if humans are still alive by then (and if the Sun has

 not swallowed up the inner solar system), we will have a spectacular light show. :)

- Are there really multiple universes? Will we ever be able to discover these multiple universes? Also, if our universe is constantly expanding, will the edges of the universes cause them to bounce off each other? will they merge? Or will they damage the superclusters and galaxies within?

- It's hard to imagine a society so religion... always bound by intolerance and fear.

- It's crazy that life on Earth began half a month before the end of December (if all of cosmic history were squished into a calendar year). All of human "history" (the parts where we started writing) would be in the last 14 seconds of the cosmic year. 2 seconds before midnight, the two sides of Earth first discovered each other.

- "Science is a cooperative enterprise, spanning the generations, passing of a torch from teacher, to student, to teacher... A community of minds reaching back to antiquity, and forward to the stars."

-------------------------------------------------@

Response to

Episode 3 - "When Knowledge Conquered Fear"

@-------------------------------------------------

- Seth MacFarlane was the executive producer?!

- The orphaned baby part gave me some super Harry Potter vibes.

- Interesting bit about pattern recognition... If it's genetic, is there any way to be "better" or "worse" at recognizing patterns? (are there any variations?)

- Does looking for patterns in the universe make us hungry for significance? That we want validation that our existence has some special meaning in the universe? Isn't it simple human nature to want to be important?

- If the ice from comets is evaporated as it gets closer to the sun, are comets "re-used" or is there really that many comets out there? And if they are reused, how do they get more water/dust/ice to freeze onto the comet if it's all been evaporated away, and space is basically a vacuum?

- "nullius in verba"- see for yourself. question authority

- Never knew Hooke had a discovery called the Law of Elasticity.

- Edmond Halley is just an incredible person... If he never urged Newton to publish his findngs, if he never used his own money to finance it, would we ever have this knowledge? & he was a great scientist in his own right. Crazy cool!

- Waiting for 2061 to see Halley's comet.

- Things "keep moving around the sun but never fall into it" because of gravity. How does that work?

-------------------------------------------------@