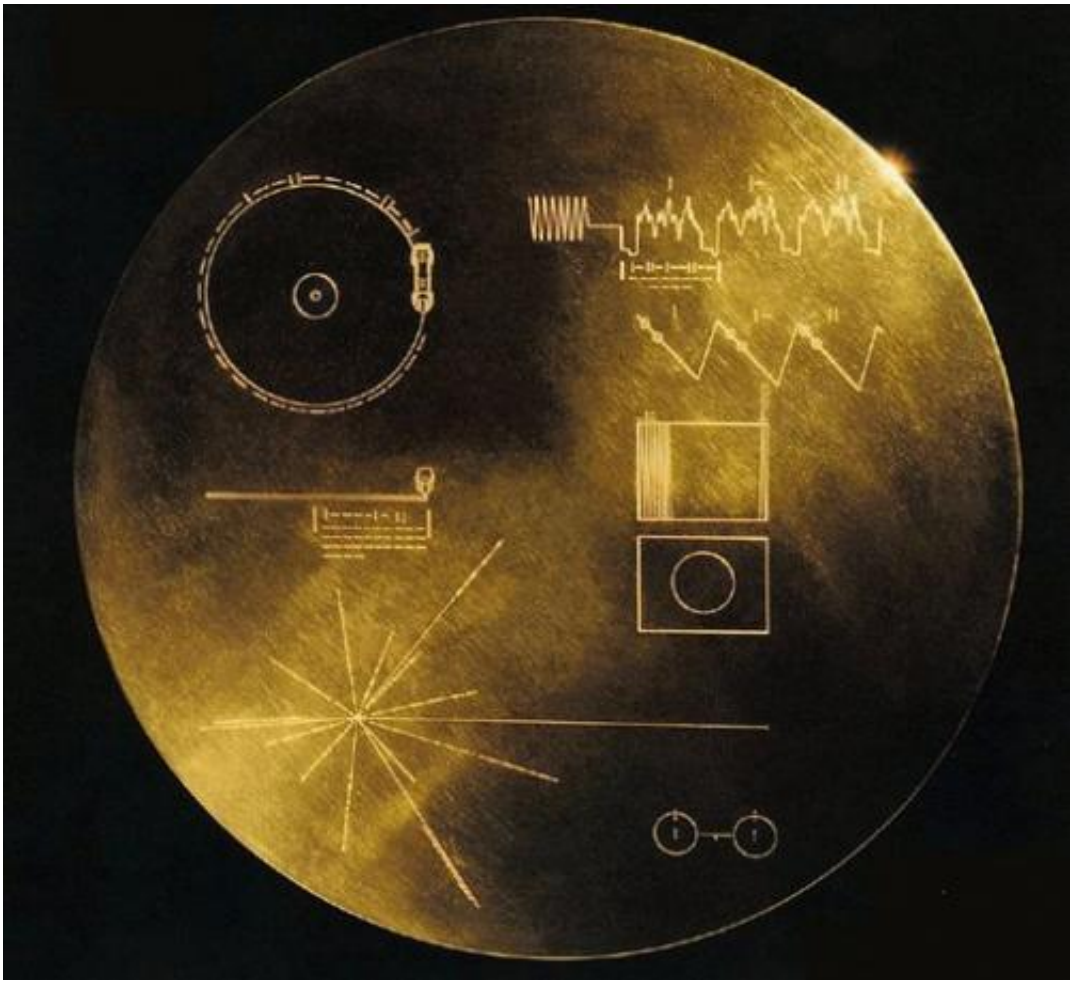
Should we call the cosmos seeking ET? Or is that risky?

February 13 2015, bySeth Borenstein



This undated handout image provided by NASA shows a message carrying Golden Record that Voyager carried, a phonograph record-a 12-inch gold-plated copper disk containing sounds and images selected to portray the diversity of life and culture on Earth. Astronomers have their own cosmic version of the single person's Valentine's Day dilemma: Do you wait for that interesting person to call you or do you make the call yourself and risk getting shot down. Their version

involves E.T. Instead of love, astronomers are looking for life out there in the universe. For decades, astronomers have sat by their telescopes, listened and waited for a call from E.T. only to be left alone. So now some of them want to aim their best radars and lasers out to the sky to say "We're here, call us" to the closest few thousand worlds. They can bring us all sorts of new technologies and answers to burning questions, some hope. (AP Photo/NASA)

Astronomers have their own version of the single person's dilemma: Do you wait by the phone for a call from that certain someone? Or do you make the call yourself and risk getting shot down?

Instead of love, of course, astronomers are looking for alien life, and for decades, they have sat by their telescopes, waiting to hear from E.T. It didn't happen, and so now some of them want to beam messages out into the void and invite the closest few thousand worlds to chat or even visit.

Others scientists, including Stephen Hawking, think that's crazy, warning that instead of sweet and gentle E.T., we may get something like the planet-conquering aliens from "Independence Day." The consequences, they say, could be catastrophic.

But calling out there ourselves may be the only way to find out if we are not alone, and humanity may benefit from alien intelligence, said Douglas A. Vakoch, whose title—for real—is director of interstellar message composition at the SETI Institute in Mountain View, California. SETI stands for Search for Extraterrestrial Intelligence, and until now it's been mostly a listening-type thing.

This dispute—which mixes astronomy, science fiction, philosophy, the law, mathematics and a touch of silliness—broke out Thursday and Friday at a convention in San Jose of the American Association for the

Advancement of Science.

And this week several prominent space experts, including Space X founder Elon Musk and planet hunter Geoff Marcy, started a petition cautioning against sending out such messages, saying it is impossible to predict whether extraterrestrial life will be benign or hostile.

Vakoch is hosting a separate conference Saturday at the SETI Institute on the calling-all-aliens proposal and what the messages should say.

The idea is called active SETI, and according to Vakoch would involve the beaming of messages via radar and perhaps eventually lasers.

This undated handout photo provided by Seth Shostak, SETI Institute, shows the Arecibo radio telescope in Puerto Rico. The world's largest single antenna, it has

a million watt transmitter. Astronomers have their own cosmic version of the single person's Valentine's Day dilemma: Do you wait for that interesting person to call you or do you make the call yourself and risk getting shot down. Their version involves E.T. Instead of love, astronomers are looking for life out there in the universe. For decades, astronomers have sat by their telescopes, listened and waited for a call from E.T. only to be left alone. So now some of them want to aim their best radars and lasers out to the sky to say "We're here, call us" to the closest few thousand worlds. They can bring us all sorts of new technologies and answers to burning questions, some hope. (AP Photo/Seth Shostak, SETI Institute)

We've been inadvertently sending radio and TV signals out to the cosmos for some 70 years—though less now, with cable and satellite sending shows directly down to Earth. In fact, each day a new far-off planet may be just now catching the latest episode of the 1950s sitcom "I Love Lucy," said astronomer Seth Shostak, a senior astronomer at the SETI Institute.

There have been a few small and unlikely-to-work efforts to beam messages out there in the past, including NASA sending the Beatles song "Across the Universe" into the cosmos in 2008. NASA's Voyager probe recently left the solar system with a "golden record" created by Carl Sagan with a message, and the space agency's New Horizon probe will also have greetings on it by the time it exits the solar system.

But what scientists are now talking about is a coordinated and sustained million-dollar-a-year effort with approval from some kind of science or international body and a message that people agree on.

It's an "attempt to join the galactic club," Vakoch said. He assured a crowd of reporters: "There's no danger of alien invasion from active SETI."

But as a science fiction author, as well as an astrophysicist, David Brin thinks inviting aliens here is a bad idea. Even if there is a low risk of a nasty creature coming, the consequences could be extreme.

"I can't bring myself to wager my grandchildren's destiny on unreliable assumptions" about benevolent aliens, Brin said.

Brin noted that European explorers brought slaughter and disease to less technologically advanced people in the Americas more than 500 years ago. He called for the science community to put efforts on hold for an ethical and scientific discussion on "why it won't go the same way as between Cortez and the Aztecs."

As Brin, Shostak, Vakoch and others sparred at a news conference, 84-year-old Frank Drake sat in the back quietly. Drake, a pioneer in the search for extraterrestrial life, created the formula called Drake's Equation that scientists use to estimate the chances that other life is out there. More than 40 years ago, Drake and Sagan beamed a message into space to look for aliens, a first for Earth.

It was a short message from the Arecibo Observatory in Puerto Rico, and it was aimed at a star cluster called Messier 13. It will take 25,000 years to get there, Drake said.

"The probability of succeeding is infinitesimally small," Drake said, rolling out calculations about the incredible amount of time it takes messages to go back and forth and his estimate that the average civilization will last only 10,000 years.

So why'd he do it? Curiosity, Drake said. And it doesn't matter if our civilization is gone by the time E.T. answers, if he does.

"We get messages from the ancient Greeks and Romans and Socrates all

the time, long since gone. Still valuable," Drake said. "We're going to do the archaeology of the future."

More information: SETI Institute: www.seti.org

Berkeley statement cautioning against active SETI: setiathome.berkeley.edu/meti_statement_0.html

New Horizons messaging initiative: www.oneearthmessage.org