Subject: The Fermi Paradox
Posted by u6795 on Thu, 19 Mar 2009 20:20:21 GMT
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"The extreme age of the universe and its vast number of stars suggest that if the Earth is typical, extraterrestrial life should be common.[1] In an informal discussion in 1950, the physicist Enrico Fermi questioned why, if a multitude of advanced extraterrestrial civilizations exist in the Milky Way galaxy, evidence such as spacecraft or probes are not seen. A more detailed examination of the implications of the topic began with a paper by Michael H. Hart in 1975, and it is sometimes referred to as the Fermi-Hart paradox.[2] Another closely related question is the Great Silence[3]—even if travel is hard, if life is common, why don't we detect their radio transmissions?"

http://en.wikipedia.org/wiki/Fermi_paradox

This came into my mind as I read a series of scifi books right now, and honestly after reading that entire article and a few other works on the subject it's a little scary.

With the universe as a whole being nearly 8 billion years old, one would assume that's plenty of time for a number of advanced civilizations far more great than our own to develop, rise and fall, millions of times over. Even with the impossible size of our universe, we should be bombarded by radio waves from other civilizations every time we turn on a radio receiver. The first radio waves sent out by humanity in the 1920s are more than 100 light years away by now, and there's no way to call them back. We have given ourselves away for sure if there is anyone out there.

And yet, there's silence. Absolutely nothing that indicates alien life has ever been discovered in the stars, and all the evidence on Earth is mostly speculative/circumstancial. Why can't we hear them?

As discussed in the Wiki there's many possible reasons for this, but just the fact that one of them is that some alien race annihilates any civilization it finds scares the hell out of me.

Opinions on this? Personally I'm excited for the future in that we'll inevitably be making contact with someone else, but whether it's for the better or for worse cannot be predicted.

Edit: Please don't turn this into anything religious related, and if it's your opinion that humans are alone in the universe that's wonderful, but keep it to yourself.

Subject: Re: The Fermi Paradox
Posted by nikki6ixx on Thu, 19 Mar 2009 20:43:36 GMT
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Maybe they picked up the stations with the Billboard Top 10 first, and decided that we're simply beyond help.

Subject: Re: The Fermi Paradox
Posted by _SSnipe_ on Thu, 19 Mar 2009 21:15:07 GMT
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I once saw something on national geographic that once years ago was a unfamiliar and really high noise for about 7 seconds that went away and no ones ever heard it again from one of those HUGE giant satellites

On another note this looks cool
http://www.zteck.com/radio/tv.htm

Subject: Re: The Fermi Paradox
Posted by BlueThen on Thu, 19 Mar 2009 21:20:31 GMT
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UFO's are seen all the time.

and, how do you know if they'd be using radio-technology? You sure they aren't using something completely different, that we as a species can't comprehend?

Subject: Re: The Fermi Paradox
Posted by u6795 on Thu, 19 Mar 2009 21:30:03 GMT
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BlueThen wrote on Thu, 19 March 2009 17:20and, how do you know if they'd be using radio-technology? You sure they aren't using something completely different, that we as a species can't comprehend?
This is entirely true, and for that matter it could be the answer to the problem, however radio technology is relatively easy to acquire in a short period of time for any civilization with the simple resources required.

Subject: Re: The Fermi Paradox
Posted by nikki6ixx on Thu, 19 Mar 2009 21:34:11 GMT
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Plus, humans already use so many different radio, and transmission frequencies, that I think it'd be very unlikely that we'd miss at least one of theirs.

Subject: Re: The Fermi Paradox
Posted by cheesesoda on Thu, 19 Mar 2009 22:19:49 GMT

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You guys act like our radio transmissions don't fade over a distance. They do. I remember on the History Channel that our frequencies fade somewhere like a mere 1-2 lightyears away.

Space is NOT a perfect vacuum.

Subject: Re: The Fermi Paradox
Posted by BlueThen on Fri, 20 Mar 2009 19:28:48 GMT
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u6795 wrote on Thu, 19 March 2009 16:30BlueThen wrote on Thu, 19 March 2009 17:20and, how do you know if they'd be using radio-technology? You sure they aren't using something completely different, that we as a species can't comprehend?
This is entirely true, and for that matter it could be the answer to the problem, however radio technology is relatively easy to acquire in a short period of time for any civilization with the simple resources required.
This is all assuming that the civilization follows a similar time-line such as our own. For all I know, they may have discovered it, but disregarded the idea of utilizing it.

Subject: Re: The Fermi Paradox
Posted by R315r4z0r on Sat, 21 Mar 2009 02:01:24 GMT
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You have to consider:
1. What if other life forms aren't as advanced as we are?
2. What if other life makes use of completely different communication technology that has no use for manipulating wave frequencies?
3. What if there simply is nothing in the vicinity that actually received any radio waves?

..Also, how can radio waves sent out in the 20s be more than 100 light years away? Radio waves don't travel at the speed of light, and even if they did, it hasn't even been 100 years yet..

Subject: Re: The Fermi Paradox
Posted by Starbuzzz on Sat, 21 Mar 2009 15:47:44 GMT
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I think at this very moment, Cylons are coming on their Basestars to kill us.

It's a possibility.

Subject: Re: The Fermi Paradox

Posted by archerman on Sun, 22 Mar 2009 17:16:44 GMT
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im not expecting anything more than primitive lifeforms from outer space to be honest.

Subject: Re: The Fermi Paradox
Posted by slosha on Fri, 27 Mar 2009 19:21:26 GMT
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Have you ever thought that maybe other civilizations don't use radio waves? Wouldn't it also take a long time for their signals to reach us, even if they did have a way of transmitting a signal? Even so, their technology could be very different from ours, because who is to say every planet that is able to sustain life is made up of the same exact elements as ours?

Also, how do scientists know how old the UNIVERSE is? Scientists don't know everything for certain, and we could very well be hearing stuff from space. They just aren't telling us. There's a theory.

Subject: Re: The Fermi Paradox
Posted by u6795 on Fri, 27 Mar 2009 19:30:39 GMT
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2GLOCK9S wrote on Fri, 27 March 2009 15:21Have you ever thought that maybe other civilizations don't use radio waves? Wouldn't it also take a long time for their signals to reach us, even if they did have a way of transmitting a signal? Even so, their technology could be very different from ours, because who is to say every planet that is able to sustain life is made up of the same exact elements as ours?
Yes, thank you, this has been established several times in this thread.

Quote:Also, how do scientists know how old the UNIVERSE is? Scientists don't know everything for certain, and we could very well be hearing stuff from space. They just aren't telling us. There's a theory.
Highly, highly unlikely.

Subject: Re: The Fermi Paradox
Posted by cheesesoda on Fri, 27 Mar 2009 22:48:09 GMT
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Nobody likes my post that brings the harsh reality to light... our waves aren't reaching intelligent life.

Subject: Re: The Fermi Paradox
Posted by u6795 on Sat, 28 Mar 2009 01:09:32 GMT
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cheesesoda wrote on Fri, 27 March 2009 18:48Nobody likes my post that brings the harsh reality to light... our waves aren't reaching intelligent life.
I admit, it made me die a little inside. But you're pretty much right.

Subject: Re: The Fermi Paradox
Posted by masterkna on Sun, 29 Mar 2009 17:41:27 GMT
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R315r4z0r wrote on Fri, 20 March 2009 20:01You have to consider:

..Also, how can radio waves sent out in the 20s be more than 100 light years away? Radio waves don't travel at the speed of light, and even if they did, it hasn't even been 100 years yet..

you are right that it hasn't been 100 years, but all electromagnetic waves from gamma waves to radio waves travel at the speed of light, just different frequencies.

Subject: Re: The Fermi Paradox
Posted by R315r4z0r on Sun, 29 Mar 2009 20:26:33 GMT
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masterkna wrote on Sun, 29 March 2009 13:41R315r4z0r wrote on Fri, 20 March 2009 20:01You have to consider:

..Also, how can radio waves sent out in the 20s be more than 100 light years away? Radio waves don't travel at the speed of light, and even if they did, it hasn't even been 100 years yet..

you are right that it hasn't been 100 years, but all electromagnetic waves from gamma waves to radio waves travel at the speed of light, just different frequencies.
Well, then I stand corrected.