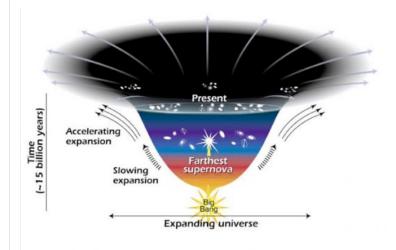


Mathematicians' Alternate Model of the Universe Explains Away the Need For Dark Energy

An alternative theory eliminates dark energy by placing Earth at the center of expansion By Jeremy Hsu Posted 09.25.2009 at 2:15 pm



Expanding Universe What dark materials lie behind universal expansion? Maybe none NASA

Dark energy is a mysterious force that cosmologists use to fill gaps in our model of why our universe continues its ever-faster expansion. But now two mathematicians have found a way to explain those baffling observations of the universe without the dark energy question mark hanging overhead.

Cosmologists first proposed dark energy to explain why astronomers saw supernovae receding into the distance at an accelerating pace. That suggested a massive amount of energy must exist somewhere to counter the gravity that would otherwise slow down such universal expansion. Such dark energy must make up roughly 70 percent of the universe, in addition to 20 percent constituting dark matter. A measly 4 percent belongs to humans, planets and stardust.

Mathematicians Blake Temple and Joel Smoller developed a new theory: Earth sits near the center of an expanding wave that began after the Big Bang. That accelerating expansion could have led to the spread of galaxies as astronomers see them today, but would not itself represent a constant accelerating force. The duo from the University of California-Davis and the University of Michigan talked with other mathematicians and astrophysicists to flesh out their calculations.

Such an alternative vision of our universe has the attraction of only relying on Einstein's equations of general relativity, *Seed Magazine* explains. The theory also helps explain another cosmological idea known as the "bubble of underdensity," or the idea that Earth inhabits a low-mass density area of the universe.

But cosmologists say that the new expansion theory has problems. First, observations of the Big Bang's afterglow also indicate the existence of dark energy. Simulations also fit rather well with the observed universe expansion when dark energy becomes a factor. And then there's the counterargument based on the Copernican principle that Earth does not have a unique place in the universe.

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TAGS Technology, Jeremy Hsu, astrophysics, cosmology, dark

energy, expansion, space, universe Only time may tell if the elegance of mathematics triumphs over the black sheep of cosmology. For now, the mathematician duo hopes to work out a testable prediction that can truly pit theory against observation. [via Seed Magazine] **Previous: Canadian** Next: Self-Regulated **Hobbyists Capture Amateur Morphine Delivery for HD Video From Near-Space Wounded Warfighters** Want to read more articles on the military, aviation, and space? Subscribe to Popular Science and enter to win \$5,000! **46 COMMENTS** 25th Scientist 09/25/09 at 2:31 pm Fascinating stuff. Incidentally, dark matter and dark energy is found in the scripure if you know where to look. I mean if the Creator created all that we see out of nothing, maybe we should consult with Him more to help us understand His universe. Just a thought. . . link to this comment i2hellfire 09/25/09 at 3:20 pm in the scriptures...right then. well when you get a chance to have a chat with "Him", let us know what "He" said ... maybe even slip in a question about what the f "He" was thinking when "He" made the platypus. link to this comment Oakspar77777 09/25/09 at 3:22 pm That is a miss use of Copernicus. It is not "Earth does not have a unique place in the universe," but rather "Earth NEED not have a unique place in the universe." So, even if we don't have to be in the center of the universe (relatively speaking) does not mean that we are not there by happenstance. Though it is also possible to say that we MUST be in the middle, because it requires that level of stability to hold the fragility of life over so much time as life has been on the Earth. The problem here is that you have one speculative guess that fits some, but not all, of the data fighting against a speculative idea generated to be the answer for all the missing and unresolved data. link to this comment geebob 09/25/09 at 4:51 pm interestingly, it was modern day creationists who have suggested a return to geocentrism. Russel Humphreys was the first to suggest this with his white hole cosmology. link to this comment skillet 09/25/09 at 4:56 pm It's pretty simple really. The universe revolves around me. Therefore, I'm at the center of it. I live on earth. Therefore, the earth is the center of the universe. P.S. i2hellfire. Any god fearing person knows that "He" (maybe they?) made the platypus so that you would question your faith.

incentate model of the oniverse Explains / way the re	
	Duh.
	link to this comment
deegeezee	09/25/09 at 6:45 pm geebob, that's not "interesting" so much as *predictable.*
	and it's funny that i've never seen dark energy mentioned in the scriptures must be hidden in between all the rape, incest, and genocide.
	link to this comment
spartacus613	09/25/09 at 6:50 pm please tell me there is some heavy duty sarcasism going one here (and i'm not talking about the article)
	link to this comment
jeebob	09/25/09 at 8:12 pm geebob, that's not "interesting" so much as *predictable.*
	much like your pointless comment.
	link to this comment
orangeblooded	09/25/09 at 10:01 pm buckrodgers No matter where you are relative to infinity, there is always the same amount of it around you in all directions. So we are always in the center of our existence. Maybe this is why man is such a self centered being?? Space is just a measurement of relative position and time a measurement of relative existence. I guess Einstien was right. All things are relative.
poopshoop	09/26/09 at 12:47 am Cool idea. The Bible burns like any other book. If He didn't like it, he'd strike me down, but he hasn't yet. So is He just busy cooking up that party in the next leap year, or was he always a proponent of freedom of expression? In that case, American history would have been less ugly. Geocentrism is tarded. We're just a happy accident. @25th Scientist We've been trying to consult with Him for thousands of years but we keep getting his voicemail. I left a message: "F*** YOU, give me my 3 wishes." Do you have his private number? Please email it to me at getalifeyoureligioustoolshed@gotoschool.org
	link to this comment
criticalscience	09/26/09 at 11:08 am poopshoop, do you know anything about God? Really? He isn't a genie! Everyone seems to have this view that God is sitting

http://www.popsci.com/military-aviation-amp-space/article/2009-09/mathematicians-seek-explain-away-dark-energy-universeged and the second se

up in the clouds smitting the unfaithful and granting the prayers of the "good" people, but that couldn't be any farther from the truth! He is in the clouds so to speak,but that's because He's omnipresent, meaning He's everywhere at the same time. So He is in your room or house or mind all at the same time. And God's desire isn't to go smitting everyone. He wants to love you, not kill you for your sin, although death is what we all

deserve.

And may I also point out that here, ONCE AGAIN, is a biased article. Last time I checked the "BIG BANG THEORY" was just that, a THEORY!!! Popsci, please remove these biased articles, at least use proper terminology, don't talk about the big bang as though it really happend unless you're willing to talk about Creation as though it really happend (paragraph 5, sentence 2). Though it has been accepted by SOME scientists, the big bang THEORY hasn't been accepted by all scientists, and it isn't the only theory out there. And Popsci, I have also seen attacks toward people who do believe in other theories in some of your articles. This is not right!!! people have a right to their opinion but please stop or prevent these attacks on personal beliefs in future articles.

link to this comment

orangeblooded

geebob

Mycellium

geebob

09/26/09 at 11:55 am

buckrodgers

poopshoop, You are an intelectual idiot, pardon my English. You missed my point. Right over your little head. I never said there was no God.If you had any type of intellectual prowess you would see the Bible for what it is"knowledge". Science only can see through observation and measurement. There are things that may exist we cannot see ie. "dark matter" yet scientists believe it exists. There is evidence of a devine order all around us. There are different things expressed by spirtual prowess that cannot be seen yet Christian's beleive exist. Does this make belief in this have any less credibility. We can only see things in the physical world relative to other things we coexist with; therefore, everything in our limited existence is relative to where we are in OUR individual physical existence. Relative to others I know your existence is pretty limited.

link to this comment

09/26/09 at 2:06 pm

Geocentrism is tarded. We're just a happy accident.

like a comment on a thread were two mathematicians cite it's virtues in solving problems with physics?

and no, we aren't discussing the theory where the sun revolves around the earth. pay attention to the news item you are posting at for crying out loud.

link to this comment

09/26/09 at 2:27 pm

How fast a comment stream can get degraded from discussing the merits of a new theory to bible bashing. Why do some feel such hatred for religion. Blame religion for all the evils inherent in man (and woman, we must be inclusive) these same evils have always been with us, before Christianity, Buddhism, Islam, neolithic fertility worship. Religion has formed a focal point to control these evils, not the other way around. There are some few very moral people who would act morally without religion, law, or social taboos. But those are very few indeed.

link to this comment

09/26/09 at 2:38 pm

Well, a couple of fellas wanted to point out the relevance of this

issue to religious considerations, (the first post I disagree with by the way... and for that matter, I never even claimed to agree with the perspective I brought up) and then come the knee jerk reactions from those beaten too many times by nuns in their catholic schools or just found their extreme fundamentalist church too simplistic.

link to this comment

09/26/09 at 3:38 pm Usually comments are enlightening but there is always an exception to the rule. I've always been amazed at how grown men and women can fight like kids. So many people hate God because they don't understand Him, nor can they imagine why a Supreme Being would send us here. A person ignorant of the scientific method would criticize the many many mistakes science makes and they would continue to do so until they understood that science only has little knowledge to work with and mistakes and critiquing of the research is inherent and required. A child ignorant of the parent's knowledge might reject counsel, not being able to see very far ahead. Nine times out of ten, our parents were right. Just because you don't understand something, be it God or science, doesn't mean it is foolishness.
link to this comment
09/26/09 at 10:19 pm geebob, your skin is very, very thin. I never even criticized you.
I merely noted that OF COURSE creationists would be the first to advocate a return to geocentrism. That's their bread and butter. ergo, "predictable," not "interesting."
link to this comment
09/26/09 at 10:20 pm btw, what are people who don't believe in science even doing reading this magazine? practicing for the Westboro Baptist forensics team?
link to this comment
09/26/09 at 10:47 pm deegeezee, what's wrong with having thin skin when you have it yourself?
Why toss out a backhanded comment if you don't want it handed back to you? And then you go and dish out more!
link to this comment
09/26/09 at 11:13 pm hey criticalscience, religion is a theory. You douchebag religious faggot. You can't prove your crappy religion any more than the scientist can prove the big bang. so take that self righteous pompous stick out your rear and kill yourself with it.
link to this comment
09/27/09 at 8:09 am buckrodgers Faith, Love, Hope, thoughts, memories, spirit these all exist but try and measure them or quantify where they originate or

where they go. They have no substance but control the physical world as we know it. We see the results on the very essence of humanity but still cannot get our hands on them and control them. They will always control us. The Bible states the all that is manifest in the flesh is first manifest in the spirit. This is where these initially manifest themselves before entering our realm of physical existence. Infinite "Knowledge" we choose to ignore. A theory such as in this article is interesting yet is bases on a very very limited amount of knowledge or as I would like to say the real truth.With our limited existence we may never know the truth but to seek it out is honorable in the eyes of God.

link to this comment

GaLoS-87 09/27/09 at 6:43 pm criticalscience: I love your view on god, as if it was any more valid than any other.

link to this comment

09/27/09 at 9:22 pm

We have to remember that a science journalist has to strike a fine balance between a) accuracy, and b) marketing his article. Note the mathematical model says that "...the Earth sits NEAR the center" (supposedly), NOT that it is pointblank at the center. At the scale of the Universe, this fuzzy region is probably the Local Group of galaxies which our Milky Way galaxy belongs to. So if there are other intelligent lifeforms in this Group, then we can fight it out as to who the universe was made for (sarcasm intended).

link to this comment

09/27/09 at 9:47 pm

geebob, it wasn't backhanded. i think this is a failure to communicate... i obviously don't speak fluent troll.

if you're incapable of debate without flipping out, don't post in a comment thread. well, at least until after you graduate from junior high.

that was an insult.

have fun studying creationism!

link to this comment

09/28/09 at 9:04 am

I can't believe some of the comments here, calling POPSCI Biased? It's a Scientific Magazine. What do you expect; I don't see religious Magazines talking about the Big Bang.

Good Job PopSci on telling us new happenings in the world of Science, Keep up the good work!

link to this comment

theinfamousmi

Chancejacoby

TitoTheThird

deegeezee

09/28/09 at 9:33 am

I think I'm seriously going to stop reading the online portion of POPSCI. Some of you guys are so ignorant it doesn't make any sense.

I can't believe that there are grown men on this site calling people who are holding science and religion on the same

accord "faggots" and other derogatory names. It's so sad. Like, grow up, seriously.

Out of all these comments, the only person that made a decent amount of sense is

orangebloodedal .

It's just not necessary to call each other names and argue over something that we just may never know. How can you be so demeaning towards someone who realizes that these theories are only theories and trusts in the divine order of things THAT WE SEE EVERY SINGLE DAY???

Some of you really need to grow up. Anyone with true intellect and love for science would understand that as scientists, we find success in proving ourselves wrong, and accepting different views and theories opens the door for growth.

Who knows, this being that we call GOD, The Great Spirit, and The Unmoved Mover, that we cannot see or directly prove it's existence, could indeed be a combination of what scientists have come to call Dark Matter & Dark Energy.

link to this comment

09/28/09 at 10:49 am

09/28/09 at 12:04 pm

09/28/09 at 7:32 pm

geebob, it wasn't backhanded. i think this is a failure to communicate... i obviously don't speak fluent troll.

no, belittling someone's point of view that you don't know much about is not backhanded. No it's not a backhanded statement when the same thing is said to you and you flip out.

if you're incapable of debate without flipping out, don't post in a comment thread.

I didn't flip out. the voice you read my posts with were your own.

and why are you posting? If you can't debate without flipping out, according to you, you shouldn't post.

The "Copernican principle" really? Come on! Until SETI starts broadcasting the Alien version of Seinfeld....the Copernican

link to this comment

link to this comment

APOK011

Bagpipes100

geebob

To criticalscience and all other religious types who enjoy critiquing people and articles on this site:

principle is just unfounded and blind faith.

Please check the title of this magazine... it says "Popular Science". Last time I checked, the popular scientific theory about the origin of the universe in western cultures is the Big Bang Theory. Also, consider Matthew 7:1-5... the Lord said, "Stop judging, that you may not be judged. For as you judge, so will you be judged." Remember, the Bible was written by Men 2000+ years ago to understand how God created and resides in the universe as they understood it.Perhaps you should consider looking at modern science as the continued search to study the intricacies of God in Nature in the most accurate means possible. God did not give the human race a

mind and a desire for understanding to let it waste.

link to this comment

deegeezee

09/29/09 at 12:48 am

oh, geebob. the "i'm rubber and you're glue" method of debate you employ is beneath even the Bible-thumping pseudoscientists you obviously idolize.

but i'm going to end this discussion, since you're clearly not up to it; i recommend you stick to the kiddie pool from now on.

link to this comment

09/29/09 at 1:06 am

I just don't understand the reason for all the bickering between the science and the religious factions. In almost every science forum I hear the same rediculous arguments. Kinda like trying to force a square peg in a round hole. The two don't mix - they are completely different lines of thought.

But they need not be mutually exclusive. Religion is a primitive science. Science was first put into use by religion. They can coexist. They just cannot explain each other!!!

The earth need not be the center of things for a God to exist. Neither does humankind need to be his greatest creation. And I'll bet my last dollar that both factions are wrong in many ways. I'll also bet my second last dollar that both are right about many things. If the religious would just admit that science (it's brainchild) has merit, then they would not see it as a force of evil trying to disprove the existance of God. God cannot ever be disproved! it is an impossibility so stop worrying! And if the scientific community would just admit that there are some things (e.g. how can all this be here from nothingness) that just cant be explained without invoking some unknown force or energy. "Dark energy"? ooooo! sounds like a mystical force to me! God will not punish you for exploring, so stop worrying!! Aren't they ultimately "believing" the same line of thought? That there are powers out there beyond our comprehension? And yes, maybe someday dark energy will be known, but there will always be some other unknowns out there. I just used the current unknown as an example.

The only real difference is that science tries to explain the unknown (theory) while religion excepts the unknown for what it is and uses faith to satisfy its mystery (theology). There is nothing wrong with either method. Both are examples of higher thinking that have brought us to where we are today. If you do not understand one or the other it is not the fault of the method but a lack of knowledge. Evolution, to some who do not understand it, is as mysterious as a belief in God is to those who do not understand Him. Both science and religion have brought both war and peace. They go hand in hand. No need to try and disprove or ridicule one nor the other. They both carry many triumphs and many guilts. Do not degrade the other cuz your method is just as ugly.

Finally, I must say that the argument is completely fruitless. No amount of science will ever disprove God so STOP TRYING!! And no amount of faith in God will ever reveal all of the universe's great mysteries so STOP TRYING!! Scientists continue your discussions. Faithful - continue your faith. carry on....



link to this comment

Today's magic is tomorrow's technology.

Bagpipes100

jaydub

09/29/09 at 9:11 am

Science is religious. The argument is never science vs religion, it is always this religions science vs that other religions science. Science is all about taking a set of axioms, building up a model and checking to see if it can be disproved. If it can be disproved then you make changes you need to or scrap it all together. There is no proof in the positive since all those axioms are taken by faith. The hard core 'atheist' is still religious in his atheism. He cannot prove his position any more than the theist or the pantheist or whatever other group you want to talk about. At best they can disprove the others scientific model.

You can see how the nature of science is often misunderstood even in the article.

"But cosmologists say that the new expansion theory has problems. First, observations of the Big Bang's afterglow also indicate the existence of dark energy. Simulations also fit rather well with the observed universe expansion when dark energy becomes a factor. And then there's the counterargument based on the Copernican principle that Earth does not have a unique place in the universe."

"First, observations....indicate..." Observations don't indicate anything in the positive. If you make a model, and the model predicts one thing, and you observe that. You're model isn't given a gold star and you know it's the right one. All you have is that it wasn't disproved. That model had no scientific, or intellectual advantage over any other model which predicts the same observation. The observation itself has no meaning, it needs to be interpreted in the context of a scientific model first. Here they use the Big Bang Model, now Temple and Smoller's model is not disproved, nor should it cast away because observation fits with the predictions of the BigBang model it should only be cast away if it makes predictions contrary to observation that has been interpreted through their model.

Further they reference the Copernican Principal, now this is a basic axiom held to by many naturalists. However, there is no logical reason to pick this. I understand there more religious reasons to pick this, but certainly nothing based on observation to suggest that a scientific paradigm built w/o it is lesser. I mean, as it stands (even with knowledge of extrasolar planets and the like) we are the only known life in the universe...right here on earth. Logic would say that until we are shown otherwise, we are in a unique and privileged position in the universe.

link to this comment

09/30/09 at 1:18 pm

@deegeezee & geebob

I find both of your attack on religion to be both deplorable and unbecoming of people of a supposed enlightened understanding of Earth and the universe as a whole.

Furthermore, I find it insulting that you categorized EVERY person that identifies with a religious faith to be "Bible thumpers" or so guided by irrational thought or ideals.

I identify myself as a Christian who believes in Creationism, but not the same "created in 7 days" type. I submit that I also believe in Evolutionism. I sincerely believe in creationism by Evolution as there is no way to ignore scientific facts and there is also no way to ignore the presence of intelligent design. This is the only logical conclusion.

My intention is not to come on here to attack either of you or to be attacked for my views. My intention is only to submit to the both of you that you are generalizing and attacking religions and even people that you know nothing about and who also do not deserve the level of contempt that you assign them.

I would think that ones such as yourselves who claim to be so educated would not stoop so low as to criticize the beliefs of others. After all such actions are just as childish as what you are accusing each other of doing.

link to this comment

10/01/09 at 11:15 pm

Natural laws could never be understood, since they are nature itself and cannot be manipulated in any way. So nature or god, both concepts are something we can study and observe, but never fully understand.

We are talking about two diferent things here. One is theory of big bang, the other is dark matter and we use same observations to study both.

Let's suppose, all objects in space are moving under the same rule, that is to find an empty, unocupied space, considering sum of all forces acting on them. Since there is an unlimited amount of empty space around the universe, all objects would spread apart indefinetly or merge together, if atracting forces are to strong. If objexts are spreading apart equally, it would apear they fly away, from whatever point inside its structure we obseve other objects.

Another thing is how all matter came into existence. I can hardly belive that all subatomic particles allready merged into elements and the proces is complete. More likely proces of forming matter and its basic elements stil goes on somewhere in the universe and there could be something lighter than hydrogen, that we can't observe yet, producing force field effects, we don't understand.

And there is a real and solid proof of god in scientific theories, so they must be wrong in some way. We are alive, created and asking questions about it, aren't we?

link to this comment

10/06/09 at 10:51 pm

jaydub,

If you have studied were the term "Christian" came from, you would realize the it IS a derogatory statement! It means-'Little Christ', meaning ,to put it plainly, someone who acts like Christ. Thus if you believe Christ was a good teacher, then you show your stupidity because he said the bible was ALL TRUE AND HE WAS GOD! Thus a Christian is ALWAYS a extremist, thus a "Bible-Thumper".

Though I myself am a Christian, I do believe the Big Bang COULD happen, but evolution(that is macro-evolution as Darwin put it) is not true. To think that amino acids would form from atoms then string into DNA then condense to form a living being make no sense to me. Of course Darwin did not know



from neverland

some.person.is

some.person.is

Jim761

Jim761

quasi44

that DNA existed then. But why is evolution treated a a law is schools when it is ONLY A THEORY!

We do not know what dark matter is but I would love to find out! The Bible (that means 'the book') says God streaches out the heavens & holds the sky in the palm of his hand. Maybe dark matter is really gods hand? Anyway to create time, space, and matter (Threefold!) you would have to be out side it. Thus a different dimension?

Please help enlighten this high schooler to 'The Theory of Evolution' and to the other matter this article discusses.

link to this comment

10/06/09 at 11:13 pm

Oh a note to my previous statement is that the bible ,as we know it was finished in 99AD by Paul (formerly Saul) in the book of Revelation. The parts I was referring to was written many generations before that. That's 3000 years before dear Mr.Hubble!

link to this comment

10/07/09 at 8:28 pm

I think that this whole hunt for dark energy may be a dead-end. Lets consider an analogy; If a cannon were fired strait up, the projectile, obeying the laws of gravity, would continue to the point where its momentum is nullified and then it falls back to earth. Imagine that we are riding on that cannonball. Everyone of the cannonballs following after us would appear to be going faster because they would be closer to their initial velocity than we are. Due to relativity everywhere we look in the universe is also backwards in time therefore the farther back in time we look the faster objects appear to be going because they are closer to the initial velocity given to them at the big bang. Jim

link to this comment

10/07/09 at 8:36 pm

All this talk about religion aside, the story of creation in Genesis is a good poetic interpretation of the big bang. And if the timeline were adjusted for relativistic effects it matches pretty well to the scientific theory and creation would have occurred in 6 days, from the point of view at the origin. Jim

link to this comment

10/09/09 at 10:04 am

Ya know, everyone races to come up with the most intelligent sounding theory every time something suggests to us that there MAY be something or other we didn't notice. Seriously, they race. Then if the guesser has any real support in academia, that's the new pablum for this week, here's yer Nobel, now go try to teach it to those kids over there whether it's right or not, oh, yeah, by the way, did you hear the buzz? Dark Matter DOESN'T exist, after all. Sorry, quantum mechanics and particle physics majors, just learn this new flavor whether it's right or not, and you still get to graduate. And poof, a PhD on the kids lunchbox, and the kid has no idea what his PhD is in. And the new Professor Emeritus makes up a new theory...

link to this comment

min to this comment

qu	quasi44 10/09/09 at 10:10 am And besides, Dark Energy, and Dark Matter a than yer stinkin Higgs Bosun. I worked out the it.		
			link to this comment
qu	asi44	10/09/09 at 10:11 am We are just starting to like our dark energie	
			link to this comment
qu	asi44	10/09/09 at 10:15 am Or maybe someone will throw dark matter of	on you.
			link to this comment
Ba	igpipes100	10/09/09 at 5:17 pm some.person	
		"Oh a note to my previous statement is that know it was finished in 99AD by Paul (form- book of Revelation."	
		Dude, I think you mean John.	
			link to this comment
Jir	n761	10/10/09 at 1:51 pm Or maybe someone will throw dark matter of	on you.
		At least thats one way to prove it exists!	
			link to this comment
jay	/dub	10/13/09 at 10:13 am @some.person.is.me	
		Why do I need to enlighten a punk HS kid of already knows everything about? I mean of everything right?	
		A Bible thumper is one who throw's the Bib believer's face at every opportunity to show and how wrong everyone else is.	
		As to extremeism, the only religious extrem here is you.	eist commenting
		btw Revelation was written by John, Christian.	
		@Jim761	
		Thank you, exactly my point. The Bible is m is not literal, it is figurative. Different areas a context. As is the case in Revelation. In the and the universe being created in 6 days, th God's perception of time as much different down to interpretation. There is nothing wro both Creationism and Evolutionism.	need to be taken in context of Creation ne Bible describes to ours. It all boils
			link to this comment
Jir	n761	10/13/09 at 7:29 pm	

Jaydub-You're welcome. I also agree with you that there really is no conflict between creationism and evolution. One describes who while the other addresses how. The real bottom line is that it doesn't matter. Believing in religious creationism or believing in pure atheism are both the same. Each belief rests upon an absurdity; one belief rests on unseen and magical beings while the other belief rests on life springing out of lifelessness and a part of the universe is becoming aware of itself. That is tantamount to a molecule in your little finger becoming aware of you. So I think Budda was right when he said "follow the middle way" Either belief is not entirely right but also not entirely wrong at the same time. Jim

link to this comment

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