2016 Zahm Lecture by Sr. Ilia Delio, OSF 9/22/16

Karen: My name is Karen Eifler. Together with Fr. Charlie Gordon, we are the co-directors of the Garaventa Center for Catholic Intellectual Life & American Culture. You know you're at an academic event when there is an introduction to the introduction, so here goes.

The Garaventa Center, your host for this evening, celebrate and deploys the fruits of faith, reason and imagination that constitute the Catholic intellectual tradition. We are delighted to kick off a new academic year with this signature lecture, UP's homecoming lecture in a way. When the series' namesake, Fr. John Zahm of the Congregation of Holy Christ, wanted his secular peers to read something of his before they found out that he was a priest as well as a scientist, he wrote it using the pen name, H.J. Mozans. Then over 100 years ago, as today, faith and reason were often seen as competing, rather complimentary, paths to knowledge. Fr. Zahm found that writing under another name offered a great way for him to expand his audience and to sneak in truths that he wanted those of his era to read, to know and to remember, to remember the great women of history who contributed to physics and chemistry and biology and to remember that holy revelation adds to the robust fruits of reason in the ongoing work of thinking through the difficult problems of his day.

We continue that worthy work today at the University of Portland and these are indeed heady days on the bluff. New buildings, energetic and brilliant students, talented, dedicated faculty and staff. Our president, Father Mark L. Poorman, who we are delighted to have in the audience today ... You may stand and wave. That's what my notes say. Father Mark is entering his forth year in the office of president and his own apparently non-stop energy has been catalytic in helping to bring all of this about and in providing us with an ambitious blueprint for the next few years.

At his right hand, overseeing the entire academic division of the university, is our provost, Dr. Tom Greene. Dr. Greene is the quintessential renaissance man, possessing a remarkable intellect that combines with a sparkling imagination and a huge heart to produce a beloved teacher and a leader who brings out the best in the people around him. As he is the University of Portland's Chief Academic Office, we've invited him to provide the formal introduction of tonight's Zahm lecturer. Please join me in welcoming Dr. Tom Greene to the podium.

Tom: Thank you, Dr. Eifler, and good evening. It's always a challenge to sift through the resume of a highly accomplished and equally unassuming individual and decide what an audience should know as you settle in for a lecture. I want everyone to know that great things are in store, but you don't want the introduction to be longer than the lecture. This is my task this evening as I introduce Sr. Ilia Delio, author of shelves of riveting, honored books and articles, as the 16th Zahm lecturer. I find tonight the poet Mary Oliver helpful here with the challenge she issued to all thoughtful people. She says our job is threefold: pay attention, be astonished, tell about it. Sr. Delio has embodied this threefold challenge her entire life.

As a child, she dreamed of becoming a scientist and of winning the Nobel Prize. That led

her to an undergraduate and master's degree in biology and a doctorate in pharmacology from Rutgers University Medical School with a specialization in spinal cord physiology. On the eve of embarking on a postdoctoral fellowship at John Hopkins University to study Lou Gehrig's disease, Sr. Delio had a life-changing encounter with Thomas Burton's spiritual masterpiece, The Seven Storey Mountain, that led her into religious life and eventually another doctorate in historical theology.

As we'll see this evening, these 2 doctorates are not in opposition to one another. Sr. Delio's robust theological and scientific imaginations link arms to tackle a world that seems prone to fragmentation and intellectual silos. She would say her message is pretty straightforward. We are loved into being by a divine heart bursting with love. Our task is to pay attention, to discover, to think, to put the fragments together, and to be artisans of the world ahead, and of course tell about it.

To a long and impressive list of places, Sister Delio has shared the fruits of her capacious imagination and restless curiosity. We are pleased tonight to add the University of Portland. Please join me in welcoming our 2016 Zahm lecturer, Sister Elia Delio, who will engage us in reflecting on cosmology, Catholicity, and consciousness, why wholeness matters. Sister. Thank you for being here.

Ilia: Thank you very much for that very kind introduction. It's always startling to hear my own biography. It's wonderful to be here at the University of Portland. It's a very beautiful campus, so it's a privilege to share with you this evening my own journey and searchings to bring science and religion into a more unified focus for a world that is seeking, I would say, a new wholeness

To begin with I'd like to call attention to the encyclical by Pope Francis issued last year called Laudato Si. In this encyclical, Pope Francis ... The subtitle gives it away. It's very concerned with our common home, care for our common home. It makes me question, "Is this our common home and is it even a home for us?" Pope Francis does ask us to pay attention to the realities in our midst. We have within us the stripping of natural resources, the rise in global warming that continues to rise. We have the species depletion that continues, the migration of species from areas such as polar-capped regions that are now melting.

It is amazing because we have known about these problems now for several decades. Pope Francis' encyclical comes now almost 40 years after Rachel Spring wrote her work called Silent Spring in 1960s. We are moving, in a sense ... Scientists tell us today ... From a Holocene Era, a geological era of geological shifts into what is now called an Anthropocene era. In other words, our ecological destruction is of such nature, that it's actually causing profound imprints on the geological structure of the Earth itself. These are irreconcilable and irreversible shifts. Of course, the poor are being displaced disproportionately.

It does impel us to ask, "Is this our home? Is this the place where we truly find our beingness, our oneness?" I think that what is so amazing ... There's a lot of amazing things about Pope Francis' encyclical, but I think he is calling us to a renewed catholicity.

I'd like to take some time this evening to explore I think the underpinnings of this catholicity. By catholicity, I do not mean the Catholic Church per se. In fact, catholicity was not even coined by Catholics. It's a word that is originally found among the Greeks. The Greeks coined the term as we began to shift, as they began to shift, from a 2-tiered cosmos, from the ancient Egyptians and Mesopotamians, to a 3-dimensional cosmos of space within depth.

It was that 3D cosmos that caused the person to stand apart from the cosmos and to observe it. The word catholicity was coined ... It's from the Greek katholikos, according to the whole. Therefore, catholicity was in a sense having a consciousness of the whole, so that someone like Plato, who was not Catholic ... Just in case you weren't sure. His sense of the world was a kind of catholicity, a consciousness of the whole, where the human life was meant to be an imitation of the cosmos, the whole order, the stars, the planets. For Plato, the wise person would know the cosmos and, in knowing the cosmos, would in a sense mirror the wisdom of the cosmos.

For the ancients, the outer world, the celestial spheres, governed the human spheres, so that the individual soul would imitate and sense the movement of the world's soul. Plato in a sense had this idea that nature has made us upright so a beautiful symmetry and harmony between the cosmos, the outer world and the human world. Catholicity, as the Greeks coined it, was really meant to have a consciousness of standing in relation to the heavens and the stars, in a sense attentive to how nature moves in a sense in its own rhythm and then guides the movement of human life.

It is not, therefore, unlikely that when this little motley crew of early Christians came along they would adopt the language Catholic to describe this new order, now with Christ as center. Catholicity was an appropriate term for the early church because, in other words, Christianity had a new consciousness of the whole now with God as center. The idea of Christ as Pantocrator, Christ as Lord of the Universe was, "Here's the whole cosmos, but God is at the center of this cosmos." We can really speak of a deep integration or link between catholicity and cosmology. Even someone like Thomas Aquinas, his understanding of God and creation, everything emanating from God, everything existing in relation to God and returning to God was a consciousness of the whole, God at the heart of this whole and the human person is the one giving glory to God.

Here's a little bit of our story and why it's a good and bad story. Although this picture here on your left is an ancient view of the Hebraic cosmos, it is very similar to the ancient Ptolemaic cosmos. You can see that it's nice and perfectly concentric. The Earth is at the center of the static, fixed cosmos. God is at the top with the heavens surrounding it and of course there is the great deep or sheol, later termed hell by Dante. Thank you to Dante. There is God overseeing the whole kit and caboodle, the paternal grandfatherly God, the benevolent creator.

We did have this idea at least for the medievals that this beautiful cosmos was a mirror of the divine, that everything in nature, trees and leaves and the beauty of the stars would express the divine reality. The human was the one who was in the center of the

static-fixed cosmos as one who could contemplate the heavens and yet mediating, you might say, heaven and Earth. We were to give voice to this whole in relation to God. Even the university, and I would say the medieval university, was a place where knowledge of the whole ... Thomas Aquinas, Bonaventure, they all studied the arts, humanities, along with mathematics, rhetoric, physics, astronomy.

You did the whole 9 yards because the university was the place to know the universe, the universe as that which turns as one. Therefore, knowledge was that knowing process that would help turn as one. Knowledge was not an end in itself. It was a way to deepen love, love that connect us to this whole to know it and to be part of it in a deeper way.

If you got that story so far, then the story takes a slight shift. In the 15th century, we had ... We were always observers of the heavens. We loved to go out ... Here in Portland, and I bet here near the bluffs, near the river, you go out and see the beautiful stars, the night watchers.

A Polish astronomer by the name of Nicolaus Copernicus was starting to night watch and starting to measure the rotation of the planets. He basically said, "Hmm, this is odd, but it doesn't seem that the Earth is center. It seems that the sun is center." Nicolaus was favored by the pope at his time, and Rome was very interested in what he had to say, but he was a little bit nervous. What Nicolaus discovered was the Earth, with the other planets, seemed to be moving around the sun, which meant the Earth wasn't static center. The sun was center. He basically hid his results under his pillow, but others did confirm that indeed was a Ptolemaic cosmos and not a geocentric cosmos.

The one who really began to make this famous was Galileo Galilei. Galileo emerges in the 17th century around the same time as the Protestant Reformation. Here is the problem because Galileo had a more powerful telescope. He confirmed the findings of Copernicus. Indeed, this Earth is moving around the sun and he could measure more accurately, but the church had wedded itself to Aristotle. It wedded itself to the Ptolemaic universe. Therefore, it seemed that what Galileo was saying was contrary to scripture. Galileo seemed to be a protest person, something like Luther and Calvin, a Protestant.

We know that it wound up at the famous trial of Galileo, where Cardinal Bellarmine said, "The doctrine attributed to Copernicus that the Earth moves around the sun and the sun stands at the center of the world without moving from east to west is contrary to holy scripture and therefore cannot be defended or held." As the story goes, Galileo was placed under house arrest until about 1984. It does depend what you say.

This, however, does begin not only just a revolution, but up to this time, especially in the static fixed Ptolemaic cosmos, science was a branch of philosophy and philosophy was the underpinning of theology. These 3 areas were held together in a single whole. After Galileo, we began to see a shift. What Galileo said is science is science. It can reveal the world to us as it really is and not just as appears, contrary to Plato. Galileo was about observation, "Let's observe. Let's measure." Therefore, he confirmed Heliocentrism, but

in doing so, what Galileo did is a very subtle shift. He changed 3 letters from why, which was the question of the ancients ... Why this? Purpose, finality ... To how? How is this working? Therefore a movement towards efficient causality.

This little shift from the why to how really began to introduce a mechanical view of nature. This slight shift. I'm not even sure he had a conscious decision here that he was actually creating or fathering 2 independent areas, science and religion. His famous maxim is the Bible tells us how to go to heaven. That's not heavens. We only have one heaven that we believe in, but not how the heavens go. He didn't feel that science contradicted scripture. He felt that scripture is about our relationship with God and science helps us understand nature.

With Galileo, we did have the Reformation, which gave priority to the book of scripture over nature. Therefore, we can begin to see this increasing confidence in scripture and a movement away from nature, the idea that all but humans are excluded from grace created an ambivalent attitude. Even though we held to the incarnation, both Catholic and Protestant, we had this idea that, "We're part of this world, but no really we're going to the next world." Our focus was more on heaven, on this other worldliness."

This kind of mentality, furthered by the rise of modern science and the rise of experimental science, really led to this separation. Religion became more inward looking, more authoritative in structure. Science began to take off on its own to make tremendous discoveries. Then we have someone like Descartes, who was a Jesuit-trained mathematician and I think very worried about a world that's changing. How could we hold the whole together? Descartes was seeking to retain catholicity.

His way to do it was this. He was like, "Voila, I've got the answer. If I think and therefore I am, there must be perfect thinking, perfect being itself. Descartes strips the natural world of any sacred meaning. It's just stuff, inert matter. He gives priority to the thinking self, the self-thinking self. Therefore, by doing that, we left the world behind, now in a sense cut off from God, cut off from the whole. We can even look at what science does after Descartes. It starts doing everything from splicing and dicing nature to tearing it up.

I hope no one is in neuroscience here because this is a very colorful view of the brain. Here is a little sense. That's covering a large amount of time in a short amount of time, but here's what [Iain McGilchrist, the psychiatrist, has diagnosed. He calls it The Divided Brain and an Unmaking of the Western World. Basically, what he said is for the ancients, the right brain ... This is the right brain here, the very colorful one that has love and freedom and passion and creativity. That brain is the brain that is in touch with the world, the world of the senses, the world of the emotions. The left brain is the mechanical side, the analytical brain, the logical brain, the strategic brain.

We take in information through our senses and we break that information down to make sense of it, but the whole brain would throw it back and we would reconnect with the larger world. What McGilchrist said is we cut off the right brain. This is what he says. The left brain, being focused on control and analysis and detail, became the most

important part of us. If you think of it ... If you look at our world today, we're very, very left-brain world. We're very good at analyzing things. We're very logical. We break things down into bits. Where we lack today is how to connect, how to have a wider vision, how to have an openness of our knowing process to connect us to a wider whole.

The left brain that is narrow tends to be the fearful brain, like, "There's not enough resources, so we need to strategize on how we're going to get enough resources." The right brain is like, "Hey, let's share with everyone. Let's have a big party." We became I think in the 18th and 19th centuries very, very capable left-brained people. I think Newton's world sort of confirms this in its own way, Newton, of course the great mathematician, the discover of the laws of motion and gravity. Newton was a very religious man, but Newton's God was something of a Deus God, what I would often call a Florida God, because God puts it in motion and then retires in Orlando and then checks in with the kids every so often, "How are things going there?"

If you look at Newton's God and Newton's world machine ... I don't know if my pointer works here ... We're all like little blocks. We're all individuals, but there are laws of nature that hold us together. We have constructed our modern culture like Newton's world. If I go to any neighborhood, we each have our little houses. I move into my house and you move into your house. If I want to talk to you, I will reach out. If I don't want to talk to you, I'm not going to bother. I do my thing. You do your thing and that's fine. We don't have to interact at all.

In religious life, we used to have an old maxim in the old days called, "Keep the rule and the rule will keep you." That was you would go into a religious community and they'd say, "Here's the rule book." You read it and go, "Okay, got it." It says, "If you have just entered, do not sit in the Mother Superior's seat." You went in one day and you sat down in the wrong seat, you were out of that community in about 5 minutes. I think of this when I go to church where I live. I go to a classroom, everyone sits in the same place every time.

In church, it's just amazing. You would think there were signs like, "This is your place in this church." People sit exactly there, and you'd walk into church one Sunday and you're a little bit late. You walk up and you go, "They're sitting in my seat. They're in my seat." There's no sign that says it's your seat, but you're thinking, "Should I move them over? Should I just crawl over them or sit on them?"

That's Newton's world. In Newton's world, we get all bent out of shape because we have our little square, and that's my square. You're not supposed to be there otherwise. Here's the thing. Since the old days of Thomas Aquinas into Newton's world ... In Thomas' world, we had a role in the cosmos, just like we did for the the ancients. We were the center. We were the voice. By the time we get to Newton's world, we're just clamoring for that little space. When we don't have space, we fall over. Here we are.

We've sort of lost our way in the whole, lost our place in space. One of my guides is the Jesuit, Pierre Teilhard de Chardin, a French scientist and Jesuit. At one point, he wrote, "The artificial separation between humans and cosmos is at the root of our

contemporary moral confusion." I want you take note of the adjective artificial. It's artificial. We have created it by the way we have structured our knowing process, and therefore, being process.

I do want to take a brief stint through the new science because I do think the new science is ushering in a new catholicity. This is not to say that the universe is catholic, but we might stretch it in that direction ... With a small C by the way. 3 areas of science very simply, the large area, the big bang, the small of quantum physics, and the complex of evolution. Newton's world was really overturned in the early 20th century by a little very brilliant guy working in a patent office in Switzerland by the name of Albert Einstein.

I think Einstein was a genius because he was so imaginative and creative. He was happy with Newton's ideas on absolute space and absolute time. Therefore, by thinking about light and the photons of light, Einstein came to a new understanding that time is not fixed, and it's not absolute. Time is what you measure with a clock wherever you find yourself. Therefore, what Einstein began to realize is we don't live in a universe that's like Legos, like building blocks. That space time seems to be part of a very permeable universe. The universe is more like Gumby or bubblegum. I think of it as bubblegum actually. It's probably a Bazooka universe, where gravity acts to structure space.

It's really Einstein's theory of relativity that has given birth to our cosmos, the world we live in. It is a very ancient cosmos. It's about 13.8 billion years old and we cannot get our heads around that. We can't even get our heads around a million years. If you're feeling old, I always say, "Think of the cosmos. It's very very old." We don't know exactly how it began. That's what science studies, that very rather mysterious beginning, quantum fluctuations, the Higgs Boson particle and all that we read about.

What we do know is it has taken a long amount of time for things to develop, about a billion years for planets and millions of years for the stars to emerge. Most of the cosmos is, this universe is dark energy, or the energy of expansion and a small percentage dark matter. We're able to continue expanding and we are being held together at an amazingly fine-tuned rate. More amazingly, this universe may continue on for billions if not trillions of years, or just infinite expansion. Again, that's the realm of science and I leave it to scientists. But it does make us wonder, what are we doing here in this very, very short amount of time that we have, as soma says, 70 for most, 80 if you're strong, and 90 with good drugs.

It is an expanding universe. In other words, it began as a hot dense material that rapidly expanded and started to cool. Of course, we feel ourselves expanding sometimes. This is how we know that we are children of the universe. Even more amazing, however, is Einstein's discovery of the interconvertibility between mass and energy. What we are beginning to really appreciate more and more is that energy is the stuff of life. This has not really filtered into our everyday thinking, but on the micro level of reality, it is all about energy.

Scientists in the early part of the 20th century began to do experiments trying to

understand is a particle and a wave, are they 2 separate things or what, as we begin to study light. What they realize is that matter, what we call matter, has this very strange characteristic of being both wave and particle. The only way we can know what something is is if we observe it. What we began to appreciate from science in the early 20th century is we are not passive spectators here. We are not just existing in this universe that the act of observation actually brings to reality what is otherwise potentiality.

Quantum reality is what describes the world of matter, matter not so much as stuff, but matter as complex webs of relationships. What we learn from quantum physics is that cosmic life is intrinsically relational, that the term interconnectivity is the most apt description of our material reality. Nature is not composed of material substances per se, but what we can say it's more like entangled fields of energy. On the micro level of life, we can say the nature of the university is undivided wholeness.

That led Paul Dirac ... When he was receiving the Nobel Prize in 1933, they had a little dinner for him the night before. At that dinner speech, he stood up and he said, "This quantum reality is such that if you pick a flower on Earth, you will move the farthest star." That's how interconnected it is, and that kind of reality has yet to really filter into our everyday consciousness, that if I cut down a tree, even a limb, or if I pick a flower, that that action will have cosmic effects. That is the type of world we live in today.

The term quantum entanglement was a phenomenon that Einstein really did not accept at first. His 2 postdoc students said, "Albert, I think really we should think about this. If we were to take 2 particles that have interacted and we split them apart and we placed one particle here on the podium in Portland and the other on the moon Jupiter and we were to turn this particle up 180 degrees, the particle on Jupiter would turn down 180 degrees." Einstein said, "I don't believe that." They said, "Well, get over it Al because it's really true." This was later shown to be true by the physicist John Bell. They call this non-local action at a distance or spooky action at a distance. Even if we are separated over vast distances, we can effect one another.

I think I would put this on the realm on the human level of consciousness. For example, I worked with a person by the name of Pat [Reid 00:35:45], and we became very good friends. Pat retired and moved to Massachusetts. We were in Washington. Do you ever have that experience? You had a good friend. They move away and then you haven't seen them for a few years. You're thinking about them one day, "Gee, I wonder how Pat is doing?" All of a sudden, the phone rings, and you go, "Oh my gosh. I was just thinking about you." We used to say, "What a coincidence." Now we can say we're quantumly entangled. Be careful who your friends are, that's all I'm telling you, because it's forever.

David Bohm, the physicist who was a contemporary of Einstein, conceived of a quantum potential, a whole factor that guides the whole of this quantum reality. In his book, Implicate Order, he had this to say, "As human beings and societies, we seem separate, but in our roots, we are part of an indivisible whole and share in the same cosmic process. Muslims, Jews, Christians, Buddhists, Atheists, Russians, Chinese, Africans, it's as if we were to take the fabric of our lives and turn it inside out, we would not be able

to distinguish one from the other because we would be part of the same whole.

We find this fascinating process of life not static, but dynamic. I think the world evolution is the best descriptive word to describe this life that has a process of lawfulness and chance and openness to newness. Before ... In fact, much of our theology is based on a cosmos that is static and fixed, but evolution says no life is open to doing new things. Yet it is the word that still stumbles a lot of people when it comes to religion.

A number of years ago, I had a young woman visit us in Washington. She said to me, "What are you working on?" I said, "I'm interested in evolution and Christianity." She said, "Evolution is just a theory. God created Adam and Eve and placed them here on Earth." I said, "No, that's just a story that was told at the time." She said, "Oh no, no. That's exactly what happened." I said, "It's really nice knowing you." I haven't seen her since by the way. I'm sure she's doing well.

Without getting into Darwinian evolution or the details of evolution, I think Teilhard allows us to describe evolution in 3 simple terms: convergence. Given sufficient amount of time and the right conditions, things will come together. As they come together, they form new levels of relationships, complexity. He said, "As they come together and form new levels of relationships, consciousness rises, consciousness as the flow of information across fields."

What Taylor had said is evolution, it's not just background to our story. It's not like, "Oh what a nice idea to talk about evolution." Rather it is our story. I think this is the part from the point of religion we have yet to really fully grasp. We are not so much in evolution. We are evolution now on the level of self consciousness. It's as if this whole cosmos now is now us. It is in our thinking and our choices.

When we talk about evolution, we are really meaning in a universe that is still open to the future, we are saying that we are unfinished. We are not finished products. I think the language of, "We failed. It's all over. We're all dying," it's got to go. If we're dying, something else is happening somewhere. We are being created. We're not just, "Here it is. What you see is what you get." Rather we are processes of being created. Life is always moving toward newness. What we do know is that evolution is irreversible process. It's not like you become more complex and go, "Oh gee, I don't like this. I think I want to go back."

Life evolves by creative power. You might say the 3 prongs of evolution are creativity, novelty and future. Life loves more life and loves to do new things very simply stated. Here's the thing, because we've been a little bit slow on the side of religion to catch up with things with the evolution, our fastest evolver today is technology. It is evolving us at an almost breathless speed. I am now old enough to remember when the first cell phone appeared in New Jersey. It was about 9 feet long. Where I grew up in New Jersey, we had a phone on the wall ... I don't know. You younger folks may not remember this, but it had a cord and you could only walk so far with the phone. I remember someone saying, "They're going to have a phone that you could carry around in your hand. I said,

"No way." Oh yay way, I had it.

Then I remember people saying, "You know, they're going to have computers that you'll be able to hold in the palm of your hand." I said, "That is unbelievable." Sure enough, thanks to Google and Mark Zuckerburg and Steve Jobs, the power of human creativity and imagination to transcend ourselves is just unbelievable. Therefore, because religiously we're a little bit, "Really? Should we talk about evolution?" Google and Googlites say, "Absolutely." Pretty soon the computer will be obsolete. We'll have chips in our heads and brain downloading, etc.

Here's the thing, we are not evolving at the same speed. I just want you to realize that. It is an open universe, but here we are. We're not at the center of this cosmos. We are the arrow, as Teilhard said. We are the growing tip of this cosmic process. He describes us evolution now conscious of itself. In a sense, we're able to reflect on the cosmos. We're able to study it. We're able to know it, but we also have a frontier position. "Where are we going in it? What are the choices we are making for it?"

Teilhard really put the emphasis on consciousness. Evolution is the rise of consciousness. I think he was onto something here that could be very important for us today and very important for what Pope Francis is saying. First of all, we're beginning to realize more and more that our minds are not just our minds. The mind is not just a human phenomenon, like all of a sudden evolution is going along and oops, there we are, this human comes along and has a mind. Rather, we're beginning to see mind is part of the whole cosmic process, so that through our minds we realize more and more is being part of this whole that is our home.

Interestingly, Teilhard looked at energy, the core energy of the universe, in 2 directions. He said there's an energy of consciousness that keeps transcending. In other words, as we know, as we're more mindful, we move beyond where we are. Yet there's another dimension to that energy that keeps attracting us. He spoke about love and consciousness as 2 vectors or 2 directions of of this core energy. You don't have to be a scientist to figure this out. Love changes us. It changes the way you think. When you fall in love, your consciousness shifts and basically that's what he's saying. To fall in love, to be attracted to another, causes your mind to open up. You see the world and yourself in a different way. That's what we're saying now on the cosmic level. Teilhard spoke about love as a cosmological force. This strikes us as almost funny. It's like love, reallly? Sounds like a Woody Allen movie, right?

What we're seeing is love is not just sentiment. Love is what you've just fallen in and out of. It's not just emotion. Love, as the ancients conceived it, was the highest good. It's about desire. It's about attraction. It's about what pulls us when we get up in the morning. What is it that we're drawn to? What Teilhard is saying is that force is throughout the cosmos. He's speaks about even particles, molecular forces among the most indivisible particles, love energy. I will challenge any scientist to start writing about love energy. That's the kind of thinking that can bridge us into a new future.

Teilhard's famous line is, "The physical structure of the universe is love." The physical

structure, not just quarks and hydrons and electrons, but these in their deepest composition as being the force of love. This led him then to ask, "If this is true, if this universe is not just being, not just matter, not just something static and fixed, but something dynamic and constantly being drawn to something more, more being in love, then what is God? And what is God doing?"

In one of his essays, he asked the questions, "Who will give evolution its own god?" I read that and I thought, "I'll give it a try," and then I invited Father Tom Hosinski to write an article or chapter on this. Who will give evolution its own god? Because we could spend the rest of the time asking, "What is God? Who is God?"

Teilhard looks at the physical process of life. We have to be amazed that after 13.8 billion years, we are sitting here this evening trying to comprehend a lot of slides in a short amount of time, but what we're about, where we're coming from, where we're going, why our earth is in a crisis? There's something that keeps holding the whole together. Teilhard called that absolute wholeness at the heart of life Omega. From the scriptures, "I am the Alpha and the Omega." In other words, the whole that we seek is already within is. He goes on to say that the universe is resting on the future, this Omega that is up ahead, that is its sole support.

This Omega is God. God, not so much as the benevolent overseer, but God as that power of the future, the God who is already there is the God who is here. He says theology has thought about God too much from the past. God is too old, too static. He says you must think about God now from the future, a God who does new things. As Master Eckhart once said, "God is the newest thing there is, the youngest thing." When we are united to God we become new again, which is a litmus test is how united to God are we?

From Teilhard's perspective, wholeness is God already at the heart of an expanding universe. This union of divinity and humanity is not just due to sin, Teilhard said, rather he sees that this whole big bang universe from the beginning is what the Christ is about. He borrows the notion of the primacy of Christ, that whether or not Adam and Eve ever existed, whether or not original sin ever happened, Christ would have come because God is love, and from all eternity, God will to love another to grace and glory. This was a Franciscan, I might add, who came up with this, who really gave the imprimatur to this idea. I think if Teilhard had discovered Francis earlier, he would have been Teilhard OFM, and we would have published his results.

We are saying that the word became evolution. That is what we're saying, that God is not randomly out there or, "Gee, they really messed it up there. I'll have to send the son to fix it up." Rather, God's been intimately involved in this whole process from the beginning. Teilhard sees these processes of creation and incarnation and redemption, these big areas that we talk about ... I really think we came up with them so we can get a theology degree, because you need a semester for each one. What Teilhard said is, "No, no, no, no. There are really 3 aspects of the one act of God's self-giving love: love poured out, God creating, God incarnating. In that union, drawing together what it not yet united, redeeming.

God's love, at the heart of this cosmos, he says is in a sense this birthing of Christ or what he calls Christo Genesis, which means when we come to Jesus, we don't come to this blip on the screen or, "Wow, what is this about, Jesus?" We're all about sin. Jesus recapitulates what the whole universe is about, consciousness, relatedness, wholeness. We see in Jesus something radically new, so new that everyone around him was like, "Isn't he the guy from Nazareth?" We see in Jesus a new consciousness. More and more, I have to say, I'm not sure Jesus really had anything in mind of a new church. I think what he had in mind was a new humanity, a new community centered in God.

He had a consciousness of God at the heart in our midst. We know that because he says, "This Kingdom of God, this Reign of God is not out there some place. It's here. It's now." Jesus was Jewish, a Jew who had a sense of God's immediacy and therefore, to trust this God in our midst, to be liberated in faith, to take up our inner freedom to do new things. I think we see in Jesus something like a second big bang. He ushers in a whole new way of being, a new direction. I think a lot of the Gospels is about newness and creativity, not so much about, "Is this right or wrong?"

I like to ask people, "Was Jesus Catholic?" This is not a test question by any means, but some people have said, "Yes, Jesus was Catholic, but his mother was Jewish." Again, I think if we take Catholic, katholikos, as a whole maker and if we don't like the word Christian, we could say Jesus was a whole maker. That's what Jesus did. He made wholes where there were partials. He made wholes out of those who were unhealthy, those who were forgotten because of their sin or marginalized, those who were in need of mercy, those in need of compassion and reconciliation. That's the kind of healing I think we find in Jesus. That's salvation, to be made whole and therefore to help make whole, the world around us.

That's why this death of Jesus is not about ... It wasn't about Jesus. We know from the Gospel of John, Jesus is like, "No, no, no. Don't make me the King. It's not about me. I must go that the spirit may come." It's the spirit that is that breath of life. It's the spirit that does new things. Jesus is released into wholeness so that death is not something to avoid. It's not something that's contrary to life. Death is that entrance into the fullness of life.

Christians are meant to be people of the resurrection, but I don't know about you here in Portland ... You look like a very enlightened group, but when I go to Easter services, we all love Christmas. Everyone loves Christmas. You don't have to be Christian. You can be whatever. We love gifts. We love babies. You come to Easter, and it's like, "The Lord has risen. Hallelujah." It's like, "Well, isn't that a novel idea? The Lord is risen. How about that?" It doesn't move. We're like, "So, amen, hallelujah. What are you having for dinner tonight?"

We are people that believe that life is at the heart of life, that death cannot be vanquished, that we cannot be annihilated, that we cannot destroy ourselves, because we believe that God is at the heart and we are living at a new level of consciousness. That's what it means to be a Christian. That it's not the same old stuff. We believe

there's a new basis to understand our destiny. We have a new sense of what it means to be human and therefore to belong to this whole.

I do think with Jesus we see a step. Christianity is a religion of evolution. It's about becoming something more in relation to God, something more whole and more unitive in love. Even Jesus said, "Don't just imitate me. You are to breath in the spirit. You are to live in that spirit of new life. The one who believes in me will do greater works than these because I go to the father, greater works than Jesus."

We are invited in this moment to not just know ourselves as creatures, but to be a co-creator, a co-creator participating with God in the transformation of this universe. What we are saying is that evolution has not ended with us. We are part of this process, and I think especially from a Christian perspective, but any perspective it demands our commitment to it.

The famous lines from the gospels, "New wine must be put into new wine skins." No, no, we insist. We'll try putting that new wine into old skins. We're pretty sure it can work. It doesn't work. The skins are breaking. It does make me wonder if this is about consciousness and love, this is about breathing in the spirit, why is our fastest evolver technology? I love technology, don't get me wrong. I'm a little geeky, but when we come to movies like Her, where in failed relationships, we will attach ourselves to our devices, to our technologies, it makes me really get wondrous about are we in a new form of cyber Platonism, that we are not attentive to this world and to this world being our lives and our lives being part of it.

Are we looking for something that's out there, that's there and not here? By doing that, we don't even recognize the person who we're next to. As one writer says, we're in the process of making one another disappear by living our lives apart from others in the company of machines. We're more happy texting one another rather than having a face-to-face conversation. How can we possibly have any respect for the Earth if we have no respect for the human face that calls our attention?

We are saying where our mind is, there our treasure lies. Where are our minds at any given moment? Usually in our day and age, they're all over the place. That's why Teilhard says to us, "Education, thinking is the most crucial path to evolution." He says, "To think is to unify, to make wholes where there are scattered fragments, not just simply to tell what things are, but to form a unity that it would otherwise be without. We think so as to unify, which means I think we need to rethink what it means to be in education today and especially at a Catholic university. What are we making whole in the way we educate?

I think often times we're in an age of hyper specialization. You don't just become a science major these days. You're not even a biochem major. You are located in some obscure cycle with the para alpha carbon matrix of this cycle, so that when you're finished, your papers will be read by 2 people, but you will get a job if they are 2 important people.

We have brain fatigue. We're exhausted. You're probably exhausted right now just following the centuries. We're tired. Our brains are tired. We have information coming at us from all different portals. Our cell addiction. We have the new thing called OCD, obsessive checking disorder. We need something like we need to train ourselves. We need new disciplines. We need in a sense the kind of focusing or what we call the Buddha brain, in other words, long periods of meditation, long periods of silence. We need to awaken our right brain, that higher level of consciousness so that we can begin to think so as to unify.

Therefore, I might invite us this evening to begin thinking about educating to what I would call deep catholicity. This is not only bridging science and religion, but that whatever we're studying, we are seeing that area of study as a way to help make whole our lives and the world. Therefore, we need to educate in a way that is both contemplative and engaging. We need to slow down and we need to build soul, to build the inner soul.

I do think we need something like cyber fast or cyber Sabbath. Can we take one day a week and simply unplug all our devices? Here's a really novel idea, you might go talk to one other person or you might just take a walk in nature. You have beautiful nature here. I think Northwestern people are much more nature oriented than in the East, but here's what Pope Francis says in Laudato si, "The external deserts of the world are growing because the internal deserts have become so vast. We are losing the sense of the interior life."

It is to realize we are part of a creative whole of unlimited potential and both science and religion tell us that, whereby our self and our world are constantly being drawn into a new existence together. That is evolution. As Thomas Berry says, "We will go into the future as a single sacred community or we will all perish in the desert." I think Pope Francis is sounding this alarm in Laudato si. It cannot sustain itself. We have an unsustainable way of life and, therefore, we begin to realize that when I am addicted to my technologies, when I segregate myself from everything else, that I am then in sin, cosmic sin, ecological sin, human sin is living in the exile of unrelatedness.

The Jewish writer, Eddie [Helerson 01:02:23], once said, "Each one of us moves things along in the direction of war every time we fell in love. If we think that picking a flower on Earth moves the farthest star and we know that we live in a deeply entangled universe, then we must be aware that not to have mercy, not to be compassionate, not to be forgiving, not to move in the direction of love makes us complicit in the wars of Iraq, Afghanistan, wherever war is happening in the world.

As Bonaventure said many centuries ago, you truly exist where you love and not merely where you live. I think Pope Francis is calling us to awaken our lives to a new level of consciousness, a consciousness of interdependence, a consciousness, a belonging to a whole, but we will only have that consciousness if we love the whole because we are the sum of our loves. Teilhard said, "In the end, love alone can bring us to the threshold of another universe. May we love well and may we love the whole." Thank you.

Karen: Ilia will take some questions, but there's lots to think about.

Ilia: Sure.

Speaker 4: God's universe is a whole [inaudible 01:04:36] insignificant little dot. [inaudible 01:04:43] nature [inaudible 01:04:51]. What is the [inaudible 01:04:56] that we and all of ourselves [inaudible 01:04:59] existence of God [inaudible 01:05:01]?

Ilia: Let me just see if I understand your question. Are you saying we're insignificant in the universe? Did I hear that correctly?

Speaker 4: As a man. We're just this little dots.

Ilia: We're this little dot. Let me just say this. A universe born out of love, there's nothing insignificant for one thing. A second thing I might just point out. From a Christian perspective, we believe ourselves to be created in the image of God, so there is something that we have the capacity for, and that is for union with God. It can seem that we're insignificant. That's precisely what we're saying here. We are not insignificant. We are significant in so far as the whole universe is resting on us for its future. How we choose, how we think, how we love will make a difference to how this process of life, biological life proceeds.

I think the whole point of life is that God is rising up in consciousness and in through us. It's not just about us. It's about the glorification of God from a Christian perspective, as creator of this universe, seeks to become known as center of the universe. I would maybe move away from the insignificance of human life. That sounds very much like some scientist would say, "This big grand universe and here we're just random events," like the Jacques Monod thing, just happens to be we're here, just lucky role of the dice.

From a Christian perspective, we say there is no dice. Whether it's a quark or a grain of sand or a star, everything is loved into being by God and everything will have its internal significance in that love in the future.

Speaker 5: Hi, [inaudible 01:07:02] premise of thinking [inaudible 01:07:07].

Ilia: Thinking and ...

Speaker 5: Can unify the whole.

Ilia: Yes, the difference here ... For the sake of time, I didn't put this in. We live in an information age and a lot of our stuff today is information. It comes in the form of the question, "Tell me what I need to know." The know is here's the 10 points you need to know. Thinking is a contemplative act. Thinking is taking that information in and pondering it, ruminating over it. We do this all the time in a certain way.

What Teilhard said is, "As we begin to ruminate, ponder it, reflect on it, we are to notice our insight shifting." You say, "Now I see." The shift of that insight then moves us to act in a different way. Rather than acting perhaps selfishly, we might act in a way that's more unitive. Therefore, knowledge that enlightens should help us unify by the way we act toward another. It's not just information. What Teilhard says, we become artisans of the world. We begin to shape the world by our actions. I find us today again so inundated by information. We're reflexively just reacting. We react instead of respond to the encounter of ideas or things.

Karen: I can take one more question.

Speaker 6: Thank you very much. I'm a physician and a researcher so like information in science. However, I realize that we're probably in a post-science era anyway. More and more people take science for granted and also question science. I think we're actually changing the way we believe about beyond in that way. We end up as humans fighting each other when we know that war is not a good thing, hating each other when we don't really understand each other. I'm wondering ... Also treating the Earth in a horrible way. We have other types of life besides humans. We're so human-centric in a way. Talk to us about those particular issues. You raised some of them. I really appreciate that.

Ilia: I think one thing I would say in response to your comment is I do think science is coming up to a brick wall, in other words, I don't think the scientific method is really holding that much any more only because life on the micro level is getting weirder and weirder. It's not graspable any more. It's not easily controllable. It's becoming more and more allusive.

Speaker 6: I think there are different ways of knowing and we're just trying to learn how to [inaudible 01:10:22].

Ilia: Yes, that's very good. There are different ways of knowing, but we put a lot of emphasis on the rational, analytic side of knowing. I think today's science is calling for the more intuitive way of knowing to at least humbly admit that there's a level of mystery even in science. We can admit that. I think science today is calling for a new level, an admittance of humility and therefore an openness to other ways of knowing. Maybe perhaps science needs ... If we can just get beyond sometimes this ... It's a type of hubris sometimes on top scientists. It's hard. It's rational, analytical. Say, "Hey, I need you." The day I hear a scientist say to a theologian, "I need you," I know we'll have arrived.

Karen: Just a couple of things before you go. We'll offer our final thanks.

If you are sitting here as part of a course, I want you to know that you can sign up for that credit on the way out. If you liked what you heard tonight and you want to know more about what's happening at the Garaventa Center and the University of Portland, we've got sign-up sheets to join our electronic mailing list. If you want to mull things over because your mind doesn't really see past the talk [inaudible 01:12:03], part of what we offer on our website and our podcast is all of our major talks. This talk will be posted probably in about 4 days online. We'd love for you to send that to your friends

that will enjoy [inaudible 01:12:17].

If you're a K12 teacher in any school system, we also have a sign-up sheet for free [inaudible 01:12:25] for you [inaudible 01:12:26]. That means shout out to our friends from the Jesuit who came all the way over to enjoy this and friends and community members from the big wide world of Portland, who helped us get the word out and fill this cavernous space and really be taken on an amazing and wild ride. Thank you so much.

Ilia: Thank you.

Karen: Thanks for coming out tonight everybody.