

Spring 2015



THE INSTITUTE FOR ADVANCED PHYSICS

The Institute News

- IAP at St. Patrick Seminary, San Francisco
- Home school conference: *Why science is the most important subject*
- Discussing *Physics for First Communion* DVD series on the radio
- *Physics and Culture* magazine: *Is Your Computer Real? What is it anyway?*

IAP at St. Patrick Seminary, San Francisco



Beginning on February 27th, the IAP put on a weekend workshop for the seminarians

of **St. Patrick's Seminary in Menlo Park, California**. St. Patrick's is the seminary in the Archdiocese of San Francisco which also serves other dioceses in the western U.S. IAP Director **Dr. Anthony Rizzi** conducted the workshop with assistance from IAP faculty member **Dr. Murray Daw** and associate member **Frank Camacho**. They spent 3 days in the seminary teaching the faculty and seminarians.

The centerpiece of the seminary workshop was Saturday, Feb 28th, the day that IAP gave a formal day-long series of presentations. Dr. Daw gave a presentation on the *Four Steps of Learning*, emphasizing the need for each step. The remaining presentations were given by Dr. Rizzi. In addition to some seminary faculty and administrators about 50 seminarians attended. This formal part of the workshop focused on the fact that we are made for Truth and Truth is the goal of our lives; Rizzi pointed out that this means truth is our highest goal. Dr. Rizzi presented the proper

by Frank Camacho, Associate Member

understanding of physics as the first science. He traced the development of modern science and showed how not having a complete physics is the root cause of the cultural and spiritual problems that plague modern man, including our inability to effectively evangelize. He also discussed how the ungrounded nature of our thinking has adversely affected everything from music and art to science itself. He also went into some detail in the physics and then followed with further detailed explanations of the nature of reality, including man, based in his book *The Science Before Science*.

(story continued on page 2)

Dr. Daw, Dr. Rizzi, Archbishop Cordileone, Mr. Camacho



(story continued from page 1)

Prior to the workshop, the seminarians were given the assignment to read Dr. Rizzi's *A Kid's Introduction to Physics (and Beyond)* and to answer a questionnaire to get a pulse on their current understanding and feeling about the core issues. During the workshop, along with the presentations and the questions posed to the seminarians to gauge their level of understanding, there were also many opportunities to engage them in more open and lively discussions about the topics raised by the workshop. One informal night session went late into the night as the seminarians asked engaged and important questions and as friendships developed through this process.



Rizzi speaks to ~20 top priests in San Francisco

In addition to the workshop at St. Patrick's, IAP was given the opportunity to educate a group of laymen (academics and other leaders) and also a group of priests involved in the diocese about the importance of the physics as the first science upon which all we know stands. This segment of the trip was in the form of two very pleasant dinners at the residence of the **Most Rev. Salvatore J. Cordileone**, Archbishop of San Francisco. The Archbishop introduced Dr. Rizzi and the importance of IAP's work. For the laymen, on Friday night, Dr. Rizzi gave a one hour talk on the nature of physics and the deep

need for our culture to return to the foundational physical principles to halt our fall into, in the words of Pope Benedict XVI, the "dictatorship of relativism." For the priests, on Monday night, Dr. Rizzi also gave an hour long PowerPoint talk. In this talk, he gave some insight into the previous three-day process of educating the seminarians and the deep need for the foundational principles of physics to be put in place and how this is done.

Now, as we know, teaching a new subject is a process that takes time and attention from students and teachers over an extended period. This is especially true of teaching these lost fundamentals, which IAP alone is doing. Thus, the Archbishop and IAP planned this three-day session as only the first installment of the educational process. The plan includes: following up with more individual-centered courses on the *The Science Before Science* for the most advanced seminarians, developing a mentor system, and also returning for even longer courses targeted to groups of seminarians.

"IAP's mission directly addresses the most important intellectual problem of the last 400 years, without which the Church cannot truly evangelize modern man.

IAP is the first and only institution addressing this problem at its core by integrating the proper philosophical depth into the heart of modern science."

Fr. Benedict Ashley, O.P., Renowned Thomist philosopher and theologian

"I found [A Kid's Introduction to Physics (and Beyond)] most enjoyable as an 82 yr. old M.D. and my 8 yr. old grand son says the same."

Raymond I. Smith, Jr., M.D., posted on Amazon

Why science is the most important subject & How to teach it!

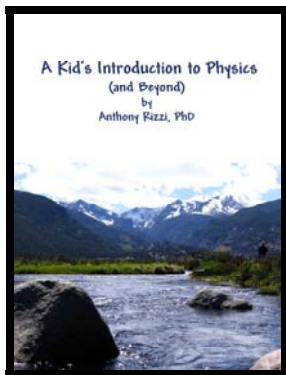


Parents and teachers at the **Roman Catholic Homeschool Association of Louisiana (RCHAL)** attended Dr. Anthony Rizzi's *Why science is the most important subject & How to teach it* workshop on April 11, 2015 in Covington, LA. They learned why physics is the starting place for all of our knowing and, thus, the proper base of every school curriculum. Dr. Rizzi says, *"The preamble of the faith, though all but forgotten, is all the things we know, indeed must know, before we receive and moreover are even able to understand the faith. The starting point of the preamble is those simple things we should learn about the physical world as children.*

All of us need this basic physics, this basic study of the physical world. Unfortunately, we have never been given it, because our parents and teachers weren't given it either. To the degree we do not have this base, we, including teachers and students, are not able to accomplish our goal: union and growth in Him who is Truth Himself."

The audience learned how to incorporate the first material ever to give this preamble in complete form, *A Kid's Introduction to Physics (and Beyond)*, and the DVD series based on this book, *Physics for First Communion*. This material is applicable to teaching the full age range of children from the youngest to oldest, and to adults as well.

A Kid's Introduction to Physics (and Beyond)



The book (6x8, 70 pages, 14 font, soft cover) may be purchased for \$12 plus s/h on the IAP web site at: <http://www.iapweb.org/store/kids>

"A Kid's Introduction to Physics (And Beyond) is an excellent and sorely needed book. This book, for the first time, explains the physics that everyone needs to know to understand our place in this world. Because it starts at the beginning with the simple things that we all learn as children through the senses and builds to explain where modern science comes in and how important it is, it truly gives the reader a big picture view of his place in the modern world.

Furthermore, without the understanding given in this book, no Catholic can have a mature understanding of his Faith. Indeed, absent an understanding of the material in this book, his Faith is placed in real danger of being confused. It is a beginner's level summary of key aspects of a modern preamble to the Faith. I urge everyone to read and re-read it."

Fr. Benedict Ashley, O.P., Aquinas Institute, St. Louis University (emeritus)



Physics for First Holy Communion

Armchair discussions that prepare you and your children or students for Holy Communion
with

Dr. Anthony Rizzi and his six year old daughter

A gift from the IAP when you support our work with a \$35 donation (plus s/h). 2 DVDs, 9 episodes, approx. 4 hours total
www.iapweb.org/store/kids.html#video

Son Rise in the Morning Show with host Matt Swaim on Ave Maria Radio

May 8, 2015 7:45am Eastern: **Physics for First Communion**. Dr. Murray Daw discussed IAP's nine episode DVD series. In this series, Dr. Rizzi uses the principles in his *Kid's Introduction to Physics* book to prepare your children along with his six year old daughter to receive their first Holy Communion. The series teaches the meaning of first Communion itself, what the Eucharist is and what happens at Mass and during Communion. Children (and parents and teachers) will learn that family relations are built through focusing on these basic truths. The series unfolds as a charming discussion between a daddy and his daughter sitting in his lap. Listen online to this show and two 2014 interviews of Dr. Rizzi:

Son Rise in the Morning May 8, 2015 with Dr. Daw
[archive no longer available](#)

Catholic Answers Live May 2, 2014 with Dr. Rizzi
<http://www.catholic.com/profiles/anthony-rizzi>

Kresta in the Afternoon April 30, 2014 with Dr. Rizzi
http://www.avemariaradio.net/audio_archive/kresta-in-the-afternoon-april-30-2014-hour-1/

Check out new resources at IAP's online magazine



[Is there in Truth, Beauty?](#)

[Is Your Computer Real?](#)

[How to Learn in Four Steps](#)

[A Brief History of Nothing](#)

See complete listing at: <http://www.iapweb.org/iapmagazine.htm>

The Institute for Advanced Physics presents
 its 13th annual conference

Physics for Realists XII

Modern Physics with a
 Common Sense Grounding
 Vol. III Quantum Mechanics
 A conference for IAP members

July 29 – August 1, 2015
 Louisiana State University
 Baton Rouge, LA



Want to know the meaning of Fideism or Scientism? Do you have seven minutes to learn about the Christian symbolism in the Star Trek episode "The Empath"? EWTN's youtube programming has over ten discussions featuring Dr. Rizzi on *Faith Matters*. Dr. Rizzi handles each topic within 2 to 7 minutes. Here are just a few of the topics you can choose from:

The Scientific Revolution

Teaching Children

Newtonian Physics and the

Faith

St. Thomas Aquinas

First Things First

Theotokos & Science

The Home of Science

Fideism

Scientism

Star Trek III

Star Trek "The Empath"

EWTN is posting new discussions each week. Find the programs at:

https://www.youtube.com/results?search_query=EWTN+Faith+Matters+Rizzi

Those who shop on AMAZON are encouraged to support IAP by shopping on **AMAZON SMILE** and designating the Institute for Advanced Physics as your charity. **AMAZON will donate 0.5% of your purchase price** to the Institute for Advanced Physics EACH TIME YOU SHOP on Amazon Smile AT NO COST TO YOU. **Your total cost will be the same whether you use AMAZON or AMAZON SMILE.** Every little bit helps!

Is your Computer Real?

What is it anyway?

by Anthony Rizzi

As you know, IAP is tackling the core of our deep cultural problems, which is our science not being clearly grounded in the principles that every child knows. IAP is repairing the core of our culture by grounding its core thinking, modern science, in our knowledge of the physical things that we know directly through our senses. To give people insight into this deep need (which is currently only addressed by IAP), IAP magazine has been initiated.

In this article, Dr. Rizzi helps us see that our loss of the basic physics principles has led us to confuse our mental world with the real world!

As you know, there is a radical difference between real things, things that exist in the real world, and purely mental constructs, things that can exist only in your mind. But, though it sounds like something only crazy people would do, nearly everyone does confuse the two in important cases.

To believe something that sounds so outlandish, I'm sure you will want a couple examples. Your computer, in so far as it is a computer, is not real. Your watch, in so far as it is a watch, is not real, but purely mental. How so? Let's start with the watch and then move to the computer. In the process, we will uncover a serious problem with our world view that threatens man's intrinsic dignity.

What do you mean my watch is not real!

When we speak of the watch, in so far as it is a watch, we are speaking about its *function* of telling the time. A *function* is not a thing, but a use we make of a thing. If we try to imagine the function as a really existing thing, we have created something that we can think about but not something that can exist on its own. Hence, the watch in so far as it is a watch, i.e. **in so far as it is an abstracted function**, is a purely mental thing, not a real thing.

The especially mental nature of the way we think about a watch is even more clearly seen by looking a little more closely at my digital watch. It now has 2:00 on it. We say

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it is two O'clock, but this is not a two or an O'clock! Those are meanings which we assign to the properties¹ presented to us by our senses. It is not two of anything let alone two O'clock, but the thing that "displays" this is a liquid crystal;² one part of the crystal is activated by a field (changing the way it polarizes the light) so that it is darker than the rest, making a certain shape. The shape is not two! Again, we assign that meaning to it. It is an artificial symbol; a symbol we made up. This is clear because other cultures have used different symbols to mean the number two. Symbols exist only in my (or your) mind, not in the thing. The thing on my wrist does not tell time, we do. Again, since symbols obviously only exist in my mind, we see especially clearly now why the watch, in so far as it is a watch, is only in my mind.

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<http://www.iapweb.org/iapmagazine.htm>

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Anthony Rizzi, Ph.D., founder and Director of The Institute for Advanced Physics (a twelve year old non-profit organization with Vatican backing), gained worldwide recognition in theoretical physics by solving an 80-year old problem in Einstein's theory. He has physics degrees from MIT and Princeton University. Prior to IAP, he was senior scientist at Cal-Tech's Louisiana LIGO and taught at LSU.

¹ We will discuss meaning of property shortly. There are nine different types of properties. (cf. footnote 3)

² It is called an LCD (liquid crystal display).