

What Matters to Me

Summary of a talk I gave at the Tucker Foundation at Dartmouth College

I've worked in the physics department at Dartmouth for 17 years now doing computational research in space physics. I like using computers to solve problems. I consider myself a sort of computational jack of all trades. My research is on the magnetosphere, the region surrounding the Earth where the Earth's magnetic field shields it from the solar wind (a stream of particles from the Sun). I study various wave phenomena, the distribution of matter in the magnetosphere, and magnetic reconnection. Especially I study oscillations of the Earth's magnetic field called Alfvén waves. These are similar to the oscillations of a guitar string with the magnetic field supplying the tension analogous to the string. I enjoy teaching, and have taught a few classes at Dartmouth, but mostly I do research. Computational plasma physics is a good niche for me. The basic equations are often quite simple. What makes plasma physics interesting is often the complexity arising from many degrees of freedom.

I agree with the bumper sticker that says "the best things in life are not things." Here's a picture of my wife Mary beside "La Fontaine des Amours" in France. (The fountain was pretty pitiful, but my wife is beautiful.)



Here's a picture of our family. We have two boys and a girl. We live in Hanover in the neighborhood north of town just beyond the golf course.



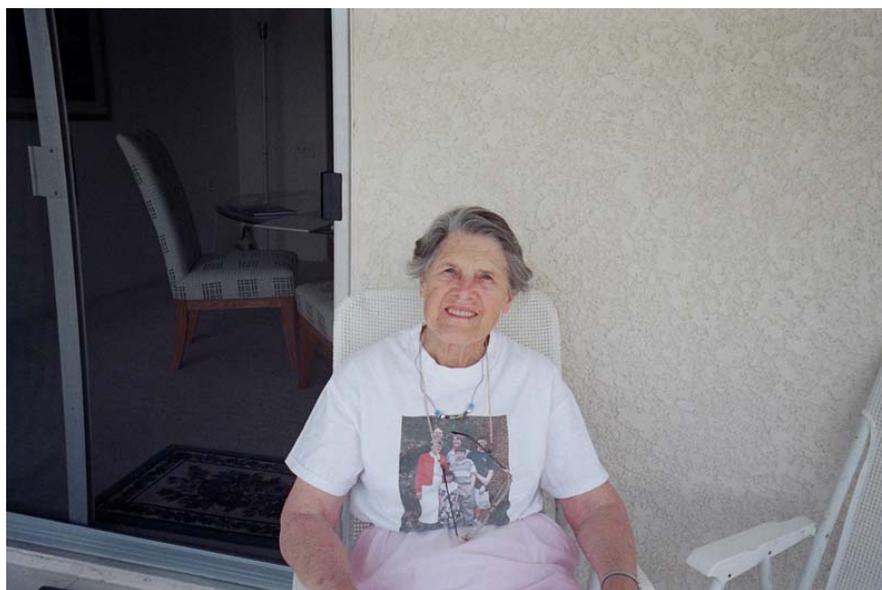
Here are my two crazy sons (middle) with a couple of their friends. They were experimenting with how they would dress for a wedding they were attending the next day.



Here's my daughter in a dress that she made.



Here's a picture of my Mom, who currently lives in California.



I grew up in liberal Protestant Church, but rejected faith in God in late high school and college. Pursuing a Christian girl (not my wife), I read the New Testament to have something to talk about and found myself attracted to the beauty of its message. I now believe that Christianity is true and that Jesus Christ is the solution to the world's problems, his forgiveness a solution for hatred and his love a solution for selfishness and empty lives.

There are several reasons I believe that Christianity is true: Biblical prophecy, the life of Christ and his resurrection, the witness of the disciples following his death, and things I've seen happen, like healings and changed lives.

I have thought a lot about the interaction of science and religion. A common view is that the two cannot interact even in principle because they describe different types of reality. There is some truth to this, but I find it more pleasing to try to integrate my faith with my understanding of the natural world. I prefer to think that what I know about God can have some influence on my view of the world, and what I know of the world can have some influence on my view of God.

However, I'm fairly open about what I'm willing to believe in the way of science. I believe in the Bible, but I don't think that the Bible is a science textbook. The Bible says that God formed man from the dust of the ground, which to my mind leaves it pretty open as to how that happened. Chance may play some role in some aspects of the world; I don't believe that God is directly (positively) responsible for everything that happens. My view is that some aspects of our world, such as evil and pain, arise from a world in which free will is possible. Yet because I'm a theist, I'm also open to the view that some things occurred supernaturally, such as the creation of life.

I believe that there is truth. Nowadays many people believe that there is no particular truth, that truth is only true for one group of people trying to gain power over others. But no one lives as if there is no truth. When it's raining, we wear a coat. We go to work believing that our job will be there for us to do when we get there. We intuitively understand that $1 + 1 = 2$ always.

There are some aspects common to most religions. Most religions have prohibitions against stealing and killing. Though there are subtle differences, most have some form of the golden rule. Many atheists also follow such a rule. I believe that such guidelines are good for us, that we will have a better life because of them. But there are some key differences among religions. For me, the central truths of Christianity are that God has revealed Himself through Christ, and that we are made right with God through our relationship with Jesus, through our acceptance of His sacrifice on our behalf, and our

willingness to follow Him. To the extent that other religions deny these truths, I believe that Christianity is uniquely true.

That gives me a desire to see others come to know Christ. When I pray, I'm not looking for a legislated change, like students being required to go to daily chapel, but I'm praying for an inward turning of people to God. Such a turning to God is happening in many areas of the world, especially in Africa and Asia. It happens here at times. I attend a Chinese fellowship group and three adults were baptized this spring, one of them a communist party member. A large scale turning to God has happened here in the past. There were times where the religious life in northeastern colleges was much less than what it is now.

That brings me to the idea of tolerance, because some people would say that because I believe people need Jesus and because I want people to receive him, I am intolerant. For me, tolerance is recognizing that people have infinite worth as beings created by God. True tolerance is not agreeing with everybody. It is respecting people and living in peace with them even when you disagree. It's loving in spite of differences.

But now there is a new view of tolerance – that we must accept all belief systems and lifestyles as equally valid, and furthermore, that we must embrace and celebrate them. I don't agree with that. Of course there is value in getting to know people with different backgrounds and experiences. They enrich our lives. But my sincere desire is that people at Dartmouth, students, faculty, and staff, will examine the life of Jesus Christ and come to experience his love as I have, not because I'm better than anyone else, but just because I've met him and come to know him.