

In Memoriam: Dr. Thomas E. Phipps, Jr.



Our colleague, the brilliant Dr. Thomas Phipps, Jr., passed away on July 11, 2016 at the age of 91.

During World War II, Phipps worked in P.M. Morse's Operations Research Group in the Navy Department. Phipps obtained a Ph.D. in nuclear physics from Harvard University in 1950, with an experimental thesis on molecular beam nuclear magnetic resonance under Norman Ramsey.

Phipps went on to twelve years in the Pentagon—ten years in systems analysis for the Navy and two in research management for the Department of Defense. Until 1980, he worked at Navy laboratories in California and Maryland.

After his retirement in 1980, Phipps opened a private physics laboratory, collaborating with his father, Thomas Phipps, Sr. (Emeritus Professor, University of Illinois). Some of the experimental work conducted at this lab led to the publication of Phipps' masterpiece *Heretical Verities: Mathematical Themes in Physical Description* (1986). In an *Infinite Energy* review of the book (#17, 1998), Jeffery Kooistra wrote: "Lots of books get ignored that perhaps should be, but this isn't one of them. Friends of new energy research will be delighted by the attacks Phipps brings against Establishment physics, Establishment publications, and particularly, Establishment thinking. But a glance at the copyright date will reveal that Phipps was saying all this even before the cold fusion fiasco brought to light just how little science has to do with Big Science these days."

Infinite Energy distributed *Heretical Verities* for Phipps in the last few years; the last copy sold a few months ago. We were considering re-printing the important book and hope to still do so.

In 2006 Phipps published his second book, *Old Physics for New: A Worldview Alternative to Einstein's Relativity Theory*. Bill Cantrell wrote in an *Infinite Energy* review (#72, 2007) that "the avid reader of dissident material will find a treasure trove of new information on this topic, along with a detailed proposal for an *experimentum crucis* to decide between the validity of SRT and his alternative theory." We have recently sold our last copy of the book, but copies are still available on Amazon.

Phipps published about 50 papers in mainstream physics journals, and many more in dissident physics journals (including *Infinite Energy*). Many of his papers are available in the Natural Philosopher's Database:

<http://db.naturalphilosophy.org/member/?memberid=170&subpage=abstracts>

Tom will be missed by all who knew him. Some of his friends have offered the following memorial contributions:

— David Roscoe —

What can I say about Tom Phipps that others have not already said with absolute conviction? Not much, in reality. So, I will content myself with a few recollections.

Prior to 1989 (I think that was the year), I knew nothing of Tom Phipps, nor was even aware of his name. But, in that year, at a meeting of "off piste" astronomers/physicists in Paris, C. Roy Keys (who, at the time, was very active in organizing such meetings) brought to our collective attention the book *Heretical Verities*, of which he had several copies to be shared between those attending who were interested. To my shame, my initial reaction to Roy's insistence that this book was very much worth a read, was skepticism along with a sigh of resignation as I agreed to at least open the front cover.

I waited until my return home to Sheffield before opening that book...but, once opened, I was completely captivated at every possible level: Tom was not an ideologue; if he chose to write about some accepted theory of physics (or indeed of mathematics), it was always because the theory concerned, in some way or other, rested upon un-analyzed assumptions (I state the case mildly), which he would then proceed to unpick with forensic skill. He wrote in such a way that we, the readers, could very quickly understand the underlying problems concerned (even if they had never been apparent to us before), and using language of such vivid descriptive force that we would never forget the issues at hand. The landscape of the subjects he chose to address was (almost) without boundaries...Tom did not consider himself as "a this" or "a that"; for him, the whole of science and mathematics was fair game for his interest and forensic ability.

So, I read and re-read *Heretical Verities* several times over the following two months after the Paris meeting and, like Neal Graneau (and I guess many others), continually dip into that lovely book, sometimes for pure and delightful entertainment but at other times, when considering some problem or other, because a little voice says to me, "I seem to remember Tom had something to say about that..."

Not very long after my first acquaintance with Tom's name, I wrote to him and we became regular correspondents (old-fashioned letters only, no emails then). In 1995, my youngest, William, was born and, to our great pleasure, Tom agreed to act in the role of the newborn's Godfather (I had to assure him that his duties were minimal...the odd birthday card would be sufficient), but the real point was, the honor was all ours, that such a warm, good and great man would agree to occupy such a position in our family's life.

It was one of my wife's great pleasures to receive personal

letters from Tom, for they were so full of warmth, wisdom and wit. He was truly a letter-writer from the golden age of letter writers.

Tom's companion in his last few years, Kathleen Lehr, managed to give us sufficient notice of his last few days that we were able to set out our proper farewells in the written word in time for Tom to receive them (courtesy of express UPS) and to reply in his usual absolutely gracious way. Thank you, Tom, for gracing the lives of this family, and farewell, My Friend.

— *Neal Graneau* —

What is sadly lacking in most practitioners in the field of modern physics is not great mathematical ability, complex machinery or fast computers, but the highly unusual combination of analysis of diverse information, uncompromising honesty and the talent to transmit the conclusions with flair, clarity and poignant allusion. I would propose that anyone who had studied the writings of Tom Phipps would agree that he was perhaps the foremost master of this latter amalgam of unusual skills. I return to his writings again and again as a soul not content with the accepted, university promoted scriptures, but one who seeks understanding from an independent sage who refused to accept paradox, sought the simplest models that explain all known facts and then communicated them with language that is as close to Shakespearian as serious science can be presented without any loss in precision. The main reason I constantly sought Tom's opinions, both published and in correspondence, was his honesty. He had an instinct that sensed deliberate or even in most cases accidental illogic and naturally sought the cause. His campaign to bring these errors to the recognition of the Establishment was a hard fought battle and even with his passing remains a struggle that has inspired others who all share Tom's hope, that however long it takes, intellectual honesty will be restored in the most sacred of sciences, physics.

One of my achievements of which I am most proud was to be in a position to perform a complex experiment in my laboratory at Oxford University based on a mathematical shape independence theorem proposed by Tom in 1996 concerning the measurement of longitudinal electrodynamic forces as predicted by Andre Marie Ampère in 1822. In conjunction with Tom's close friend in Sheffield University, David Roscoe, and my father Peter Graneau, we performed the experiment, analyzed the results and argued against a wall of disparaging referees, but eventually published a paper together in 2001 [*European Physical Journal D*, "An Experimental Confirmation of Longitudinal Electrodynamic Forces," Vol. 15, Issue 1, pp. 87-97]. Tom and all of us considered this to be the most convincing demonstration of the validity of the pre-Maxwellian Instantaneous-Action-at-a-Distance (IAAAD) paradigm to date, thereby delivering another fatal blow to the modern post-Maxwellian physics of Lorentz and Einstein against which Tom railed throughout his career.

As many will attest, Tom was a consummate correspondent and there will be files both in cabinets and hard disks full of lively debates over the wide range of subjects in which he was engaged. I took great pleasure and learned a tremendous amount of physics, philosophy and scientific method

by eavesdropping on the letters written between Tom and my father covering the field of electrodynamics and the failures of Einstein's theory of Special Relativity. It was a great honor when I became part of Tom's salon in my own right many years later. Tom eventually became my most trusted sounding board when I needed to hear a truly honest opinion on a new theory or experimental concept. He was able to let me down gently or fill me with confidence more than any other colleague I have ever had and for that I will miss him tremendously.

Along with a number of other physicists dotted around the world, Tom was a crucial part of a small band of adherents to the IAAAD philosophy of matter interaction. Tom's lucid writing made clear that while we had a consensus on where modern physics was decisively broken, there would be no clear path regarding what to replace it with. Tom had a very gentle manner of proposing his replacement theories with strength, but not so vehemently as to leave no room for other concepts and healthy debate. His attractive style and foresight into the vagaries, strengths and weakness of human thought will ensure that anyone who reads his works will be rewarded and, without doubt, will have had their mind changed in some way. To me, this will remain Tom's greatest gift and legacy.

— *Cynthia K. Whitney* —

Tom Phipps came into my life along with Peter Graneau, back in the mid-1980s. What wonderful friends these individuals proved to be! Tom was possessed of a wicked wit that leavened the lives of all who knew him. Such levity was much needed by members of a community experiencing severe cognitive dissonance. We were all finding ample evidence that something was not right in Modern Physics, but at the same time we were finding that, among physicists, there was little willingness to examine the evidence objectively, which would have ultimately demanded that they become willing to consider appropriate revisions to long-standing doctrines.

The big problem is this: much of the 20th century belief system is tied to Einstein's Special Relativity Theory (SRT), and SRT is, in turn, founded in part on his Second Postulate; namely, that: the speed of light is the constant number c relative to all inertial observers. There is a clause missing from this Postulate, one that everyone before Einstein had assumed, that Einstein himself assumed, and that almost everyone after Einstein assumed, all of them without ever stating it, much less testing it. The un-written clause is: "...over the entire light propagation path...all the way back to the light source...no matter how far back that light source was...be it a distant star, a distant galaxy, or even the Big Bang creation event!"

You can tell that this un-written clause is always assumed, because calculations before, during and after Einstein have always involved simple ratios like R/c , where R is the length of the light propagation path. If c did not have the same reference all along the propagation path, then c would not really be a constant, and the simple ratio with c in the denominator would not be appropriate.

Think about it: SRT actually represents the ultimate in anthropocentrism. It is like what we had before we had Science, when Cosmology was a branch of Theology, and

Man was at the center of God's Universe, and everything else orbited around Man!

Ideas alternative to Einstein's have always been needed, and Ritz was early to offer one; namely, that the reference for c be always, not the receiver, but rather the source. This idea is not anthropocentric, but it did not work out for the first test cast: stellar aberration.

And then came Sagnac. The Sagnac effect does not support either Einstein or Ritz. The Sagnac effect supports a more modest statement; namely, that the speed of light starts as c relative to the source, becomes c relative to each successive bit of matter that the light encounters, and so ends as c relative to the receiver.

This modest idea works well. I look forward to discussing it one day with my now-departed friends: Tom Phipps, Peter Graneau, Jan Post, Bob Heaston and so many others.

— *Greg Volk* —

I first contacted Dr. Phipps in 2008 after reading a paper written in 1927 by his father, Dr. Thomas E. Phipps Sr., which measured properties of hydrogen using then-new atomic techniques. I was delighted to learn that Dr. Phipps Jr. was indeed the son of the same, that he had earned a Ph.D. in physics from Harvard, that he had worked closely with Nobel Laureate Norman Ramsey, that his career connected him with several other amazing physicists, that in his early retirement conducted experiments with his father aimed at reinterpreting conventional thinking in modern physics, and that he was among the most prolific writers and critics in the dissident universe. Wow!

Though I realize the NPA's Sagnac Award has impacted little, I will always keep a place in my heart for Dr. Phipps and the other 2010 recipients, whose contributions, in my opinion, compare favorably with the physics Nobel Laureates of the same year. Like Avogadro, Phipps' interpretations of relativity will, I believe, ultimately prove correct. Though he did not live to see all of his experiments conducted, he most certainly did propose specific tests that determine measurable second-order differences between conventional thinking about light, and his own neo-Hertzian relativity. But beyond thoughts of his own, Phipps was amazingly well-read, critiquing hundreds of books and papers of other dissident authors. This contribution alone merits him the title "renaissance man."

I feel sorry for his online detractors, who never bothered to read his material, since Phipps' credentials were so unimpeachable, his prose so lucid and delightful, his facts so clearly presented, and claims so understated. I consider it a great honor to have known him, and exchanged ideas with him. He was a great man of science in the tradition of Newton, Maxwell and, well, Sagnac.

— *Brigitte Graneau* —

We mourn the loss of a great and independent mind. The death of Thomas Phipps leaves a void among those who pursue science unhindered by the constraints of the establishment. Dr. Phipps has encouraged many to follow their convictions and I trust that his inspiration will continue to produce progress into the unknown.

My sincere sympathy goes to his family and colleagues.