



Ernest Henley
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Erich was a wonderful person. He was a good physicist, and a warm and very generous individual. He liked to share his knowledge and his own goods (food). In addition to his role in founding TRIUMF, he helped me to set up the NW Section of the American Physical Society. He was one of my favorite friends and is irreplaceable. His passing is a huge loss.....Ernest Henley



I strongly regret the passing of Prof. Erich Vogt. I have had many excellent discussions with him about particle physics.

Professor David Cline
UCLA



Kim Maltman
Professor of Applied Mathematics
York University

I first met Erich Vogt when I went to UBC to start graduate school in physics after an undergraduate degree in math and chemistry that included only a few physics courses. My first impression of him was one of this huge personality, great enthusiasm for physics, and love of teaching, especially the first year physics course, which I recall him typically appearing before wearing what I remember as a terry-cloth headband. In typical Erich fashion, he thought, given my sketchy undergraduate preparation, that an excellent way for me to get started in my career in graduate school would be to serve as the marker for a course I hadn't yet taken myself as an undergraduate, and later in the term to substitute for him as lecturer in a course I was myself taking from him when he had to be away for a day. Needless to say this was all a bit of a daunting prospect, but, I have to admit, an excellent idea in hindsight.

Those of you who knew Erich will probably

concur when I say that, in my experience, he was no shrinking violet. He had not only a strong enthusiasm for physics, but also strong opinions, and the two were frequently combined in a kind of delivery that I might characterize as dispensing with unnecessary circumspection. One of the great things I think (and hope) I learned from him is that physics can be pursued in a kind of no-holds-barred-fashion that is, despite its no-holds-barredness, fundamentally communal and cooperative in spirit. He was a terrific physicist, and a terrific person, and his presence in our community will be sorely missed.

Brian Mullen, MSc

I.S.P. Information systems planning corp.

UBC staged a celebration of Erich in May 2008. Three afternoon sessions included speakers from CERN and Stanford.

Participants were asked if they would talk for one minute at the reception in the evening. When I said Yes they asked if I would do five minutes and I said YES to recognize Erich's contributions to the community and I wanted to thank him. Erich was sitting two meters in front of me and I remember watching his face when I compared working with him to stepping from a platform onto a fast moving train. After I talked the head of Triumph said my thesis is an example of what a graduate student could do. Because of our calculation, they built Triumph 25% bigger.

First I met Erich when he taught our fourth year physics class (1966). Little did I know that our paths would cross. At this time Triumph was a one meter wide model.

Erich is a go-to guy. Let me explain what I mean. My thesis topic was the calculation of the lifetime of the H⁻ ion in an electric field. H⁻ ion consists of a proton and two electrons. As you accelerate beams of ions in the triumph accelerator the electromagnetic forces tears the ion apart. Once an ion loses one electron it becomes neutral and leaves the accelerator. Sort of like an atomic decay problem. Would there be enough ions in the beam to be a useful beam? They had experimental results in low energy range but needed a theoretical

curve to extrapolate to the high-energy range. This was a pretty crucial question to the success of Triumph.

At the time, the three body problem was insoluble except in when the second electronic was in the field of the first electron and the potential was $1/R$. In the special case, the problem could be solved using a spherical coordinates. My first supervisor specialized in three-body nuclear physics so they delegated the problem to him. After about a year, we had run into a brick wall. He asked whether I would like to switch to his area of specialty or continue with the H- calculation with Dr Vogt. The H minus calculation interested a lot of people due to its importance to Triumph. I was hooked on the H- calculation so he suggested that I talk to Dr. Vogt which I did.

How did I get into graduate school? Several professors suggested that I apply for graduate school. I was not sure because I was not in the honors Physics program. So I talked to Dr. McMillan who taught us Classical Mechanics. He said I could work under him in Theoretical Physics if I did enter Graduate school. I applied that day.

How did I get to work with a world-class physicist like Dr Vogt? The scope of Erich's vision was mind blowing. Triumph continues to be a success today.

When Erich talks to you, he is fully engaged in the conversation. Erich ran through a checklist of items. Have you tried this? Yes I replied and here were the results. We reviewed at least four approaches. Then he suggested treating the problem like a nuclear decay problem and apply standard methods. At the end of the meeting I was working for him. Working with Erich was like stepping onto a fast moving train from a platform. Almost instantaneous acceleration.

I did make some contribution to the accuracy of the calculation. After Erich told me that I could write up my results for my thesis, there was one major improvement that we could make. I had found a more accurate statistical wave-function based on ten plus parameters by a Russian physicist. Another innovation is that I iterated the calculation over fifty times. a first version of using the wave function and this gave me version 10. I then fed in version 10 to get version 20. I must have run 50 versions before to get my final answer. Each ten version I analyzed the result that I was getting.

Well how did we do? When I finished my Master's thesis I travelled around Europe for twenty months. When I returned I was curious and so revisited UBC. They now had experimental results and our theoretical calculation was out only by a factor of 2 over many orders of magnitude. I was ecstatic that we were so close over so many orders of magnitude. UBC had a post-doctoral fellow from New Zealand checking my calculation to see if I had dropped a 2 somewhere. Maybe in retrospect, I had calculated the decay of one electron and the existence of two electrons would double the chance that either could escape. My thesis

“Toward on accurate calculation of the H- ion in an Electric Field” is online on the UBC website. See if you can find the factor of 2.

I pursued a career in information technology. On reflection I could have continued in physics.

As physicists we're trained to take physical problem translate them into logical equations, solve the equations and then translate the solutions back into the physical world. Building computer systems are similar. If you understand physics, computers were challenging but easy.

Some other things I learned.

Life is a process of continuous improvement. Never stop learning.

Document your computer programs. My thesis did not include a copy of my program, which made it more difficult to verify or repeat the calculation.

The importance of teaching in stimulating thinking and encouraging students to developing themselves to the maximum of their potential. The time to stimulate these students is in first year.