

## ZULF'S RECOLLECTIONS OF EARLY HISTORY OF FOUR-SPHERE THEORY

I had inkling that four-dimensional electromagnetism would be correct in 2007 perhaps. Then I was involved with Chris Thorpe's Babel Research. I might have spoken to Chris about it once or twice. He fired me the summer of 2008. I had a new place, a loft in Williamsburg. I had befriended by neighbor who is a famous Spanish painter and I wanted to start my own company.

It was there in my Williamsburg loft that the ideas of Four-Sphere Theory grew. At the time I was not about to challenge Albert Einstein's Relativity Theory or Schroedinger's Quantum Mechanics. I was much more interested then in the general idea that quantum phenomena in nature ought to be *explained* by compactness of space. I had strong background in spectral theory of compact manifolds especially because the Functional Analysis course that I took at Princeton with Peter Sarnak was very good and we had worked through aspects covered in Reed-Simon I in 1993-1994. I felt very strong about my intuition about it. I read many articles on physics theory and history and finally emailed many people including John Morgan and Daniel Stroock and many others regarding the possibility that Four-Sphere would produce a good fundamental physics theory. I had the book of Richard Schoen and Shing-Tung Yau *Lectures on Differential Geometry* and I was then mathematically oriented. I just became very convinced that Einstein's General Relativity equation is really some sort of structure equation that said "physical universe is constrained to be a smooth hypersurface of a fixed radius four-sphere". All of these ideas were in a very preliminary state, based on my mathematical intuition which was strong. At the time it did not even occur to me that I was challenging Special Relativity immediately. In my mind, the intuition was that we'll make sense of Einstein later by some technical work like ADM theory etc. I was not too worried. My main concern was quantisation and red shift and these things. In Williamsburg I was alone and did not work with anyone at all. My emails did not yield much interest, certainly no funding or tenure offers.

So from the beginning Four-Sphere Theory was a solo effort. And for the next decade it was a solo effort all along. Finally after years in Allen Texas, I put together notes giving the fuller theory. I was on disability living in my aunt's house. It was a difficult arrangement as there are always problems living in someone else's house for many years.

Now let me tell you about credit. Four-Sphere Theory is mine alone in credit. I worked on it by myself from start to finish and all the ideas that go into it are my own ideas. They had actually no input from anyone else at all. They were not supervised by anyone else. Four-Sphere Theory is my work and my work alone.

I have to make this a clear issue because Bill Gates got involved and he wants to give the impression that Four-Sphere Theory had something to do with white men. I don't have trouble with white people but in this case Four-Sphere Theory had no white people involved. Brookhaven Labs, which has many great physicists

– and the greatest of them are those testing my Four-Sphere Theory – are white in many cases, and I have great praise for them. But no white theorist helped me at all with Four-Sphere Theory. I want posterity to be clear that Four-Sphere Theory is my work and it is mine alone.