AUTOBIOGRAPHY

by Tigran Aivazian

and 1st January 1972. As my father died before I was born, I was raised by my mother, uncles and grand-parents. By the last year at school I have studied physics and mathematics up to the level of approximately third year at the University. Having graduated from school with the medal for distinction I entered the Physics Department of the Yerevan State University.

At that time the authorities of the University created a "group for especially talented", in fact two such groups: one for the students of physics and another for mathematics. Nevertheless, I have modestly applied to the ordinary group. But, during the entrance examination, the examiner was amazed and, not quite understanding what I wrote, he called a professor of Quantum Mechanics and another one on General Relativity and these two, sitting comfortably upon my desk and calling me "my dear colleague", had a nice chat concerning my future plans, each suggesting that I select his field for specialisation. Ironically, when the time actually came to make this choice (at the third year at the University) I chose General Relativity, but after graduation and move to the UK I slowly shifted my reasearch work from the problems of space,

time and gravitation to those of the foundations of Quantum Mechanics and the extensions thereof. So, I was immediately transferred to this "special group" - both professors saying "even in the special group it might be a bit boring for you, but in the normal group there is absolutely nothing for you to learn." By the way, my then future wife was studing at the similar "special group for mathematicians." There were many differences between our studies and the "normals", as we called them. The most important difference being that we had a much broader curriculum. When I moved to the UK and showed my diploma it was recognised (by QMW, University of London) as two separate MSc degrees with distinction: one in theoretical physics and one in computer science.

The government of Armenian Soviet republic placed great expectation on these "special groups." But the USSR collapsed just before the time of our graduation and all the "geniuses" left Armenia, some for USA, others for Europe (especially Germany), yet others for Russia. My director of studies was Prof. Armen Sarkissian, who later became the Ambassador of Armenia in the UK and then the Prime Minister of Armenia and, recently, the President of the Republic of Armenia.

I was invited by two British universities: University of London and Kingston University. The story of invitation by Kingston University, perhaps, deserves some mention here. It so happened that in 1993 two economists from Kingston University visited Yerevan State University and gave a very brief course of lectures to the economics students, lasting just one week. Anyone could enroll in these lectures, not just the economists. And so I did. I had just one week to find a way to impress them, and not just that, but to make their experience so shocking as to "force" them to invite me to the UK. Remaining in Armenia at this time of war meant certain death: there was no gas, no electricity, no food, no water, the gangs were killing each other on the streets and the worst criminals became the rulers in the government. If a person was sick or dying one could not even call the ambulance (excuse no petrol!) and so I watched in despair the agony of my grandfather dying for the long three days and nights. It was in fact during those three days that my hair turned from black to being absolutely gray.

So, having surrounded myself with the books on economics, I studied, with the deadline looming large on the horizon. On Wednesday (i.e. on the 3rd day of reading economics books for the first time in my life) it dawned upon me, that John von Neumann constructed what he called "Quantum Economics" by analogy with the then new thing called "Quantum Mechanics." But, I thought, if von Neumann did this with the "ordinary Quantum Mechanics", then what is to stop me from doing some-

thing similar with my own "extended Quantum Mechanics?" I had already at that time thought on the extension of Quantum Mechanics, which later became known as "Quantum Infodynamics." So, by Thursday morning I wrote a paper called "On the New Method of Price Forecasting", where I developed this new method and constructed a stochastic propagator which could be used to predict the evolution of uncertainties in prices, given the deterministic expression of the function of "law of supply and demand."

I handed in this paper to the visitors from the UK, modestly asking for "their opinion." One of them took the paper, put it into his bag and said indifferently: "I'll take a look." But on the morrow — the last day of their visit — his face had a quite different expression! Before the start of the day's lectures he himself sought me from the multitude, saying something like this: "Unbelievable! Where did you learn of this approach? We both never heard of it before!" I explained that this is my original discovery, made just the day before yesterday. His (and his peer's) decision was made right there on the spot: "Would you like to come to the UK?"

Very soon after arriving in the UK I made a decision to leave the academical environment and switch to working as a programmer. I found the atmosphere of academia

¹http://quantuminfodynamics.com

permeated with envy, greed and purely materialistic motivation and this was abhorrent to my spirit. There was also a practical reason for my decision. Although everyone was saying "without a shadow of doubt, Tigran will win a Nobel prize in physics", I had my doubts along the following lines: "Even if I do get a Nobel prize, it will not happen tomorrow, perhaps not for the next 10 years or so and, in the meantime, I face either a possibility of even temporary return to Armenia (as is common among PhD students) or I will be forced to always rely on these horrible things they call "grants" — forced to ask for money when I can easily earn any amount of money I wish, using my own intellectual capabilities." The very thought of even a tiniest, remote possibility of a temporary return to Armenia was absolutely unacceptable, so I had to make a decision.

And so I had to choose an alternative field of endeavour which was sufficiently complex to be stimulating for my mind, which would othewirse grow stale and eventually perish if not given problems to solve, which others deemed "impossible." Well, just such an entity exists in the world of computing — the Unix operating system. So I worked as a Unix kernel engineer at SCO, but even this presented a moral obstacle — I always believed (and still do) that everything in the world should be free and the price we pay for products should be set strictly to the

production cost, i.e. no profit should ever be made by anyone on anything. People should find sufficient incentive for work in both the joy of creativity itself and the great inner satisfaction of rendering useful service to one's fellows. But, alas, the world of commercial Unix development was not entirely altruistic and so I switched to the Linux kernel development. Having become one of the key contributors to the Linux kernel I was employed by VERITAS purely for the sake of my name, i.e. at the first mention of the news "Tigran Aivazian himself joined VERITAS, so these guys must be taking Linux seriously" the price of VERITAS shares went up. I was paid a very high salary and given absolute freedom on what to do — no one ever gave me any direction or dared to influence my decisions. And so I worked very hard on making Linux the best operating system in the world.

In the meantime, I continued my research in theoretical physics, working apart from the "mainstream." Well, I had access to all the articles and books, published by the "mainstream", but my goals and motivation were of entirely different nature. I worked and continue to work for the Future of Mankind, for the time when the brotherhood of all humans, predicated upon the fatherhood of God, will rule this planet. For the time, when the chief motivation of work will become service to all and not profit to self. I am confident that such times are not in

the distant future, but, behold, they are really upon us. Any individual, if he so chooses, can live even *now* in such an enlightened epoch in his immediate surroundings and deal with everyone according to the principles of brotherhood.

While working independently I published a paper in 1996 about the newly discovered analytical solution of Einstein-Vlasov equation, which I interpreted as a cosmological solution², but was soon contacted by Howard Brand of the *US Army Research Laboratory*, who wanted to know if what I found was just a one-off solution or if I managed to generate large classes of such solutions. I did not realise that they were working on similar solutions for the problems in the area of controlled thermonuclear synthesis.

More recently, I published a paper *Extended Hilbert Phase Space and Dissipative Quantum Systems*³, where I describe some of the features of Quantum Infodynamics. This paper was discussed with the scientists working in the same area at Princeton University.

When I say "published" I always mean "made public and accessible to all" and I never publish anything in the so-called "official peer-reviewed journals", the reason being is that they are owned and controlled by the greedy

²https://arxiv.org/abs/gr-qc/9605045

³https://arxiv.org/abs/1702.07746, see also my ResearchGate page at https://www.researchgate.net/profile/Tigran-Aivazian-2 for more papers.

capitalists, who have nothing to do with science, but simply make money by vainly trying to restrict the results of one researcher from being accessible by all others. I despise this attitude and refuse to dignify such a journal with the presence of my work.