

# **OPEN LETTER TO KLAUS GOEKE ON THE OCCASION OF HIS 65TH BIRTHDAY AND RETIREMENT**

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Thinking about my personal experience with Klaus Goeke is tightly linked to my early beginnings as a physicist. Our professional relation endured from 1987 till 1995. When I now check in the Spires database the number of joint works with him, he was having the record, 28, until March 5th this year. Altogether, this is around a quarter of my scientific output. I swear I have been working like mad ever since, but I am sure this figure provides an idea of the pace and intensity of such a collaboration. It also makes clear how much my scientific career owns to Klaus not only quantitatively but also qualitatively as I try to argue below.

I do not have a clear picture of the time I first knew about him. Actually, his whistle always anticipated, like a locomotive, as he approached the students offices along the corridor at the IKP in the former KFA Jülich (now FZ). Likewise, it would fade away as he departed, and silence would return to the Institute. It took me some time to decode the meaning of this custom that has been a constant in his behavior, as far as I know. Now, I believe that this reflects the underlying instinct desire to have a good mood. I have always admired this inspiring optimistic "bootstrap" attitude in people since by thinking of that person I boost myself. However, being a locomotive for a full community is something that can only be achieved by a few people with a natural gift for leadership. Klaus, of course, belongs to this selected club.

I do remember when he proposed me to make the PhD with him. After a few minutes I was enrolled. The subject would be Chiral Solitons, a hot topic then, which Klaus was practicing for some time. Calculations, internal seminars, discussions and the like followed during the next four years. Klaus was gathering a little group of people and planning their research. In any scientific discussion, he has always keeping an eye on what task might be allocated to a specific person. In scientific meetings the, frequent, culprit of optimism would be reached when Klaus would express his conviction that with the output of the discussion "one would need generations of PhD students to accomplish these calculations", a statement that I would be skeptical about. He was right. I see that a part of recent work of Klaus and his PhD students and collaborators uses Chiral Solitons, because much interesting information can be triggered by this approach.

There was a reproduction of a "Modigliani" painting hanging in his Jülich office. You could not avoid seeing it as you walked in. That is why some Spaniards and Italians in the IKP nicknamed him after the famous painter. There is a scene in that office which I vividly remember. Klaus was sitting at his desk. I was reporting him urgently on the typical "extremely important

findings" which so often emerge just seconds before your boss wants to go home and equally often turn out to be completely wrong the next day. It was summer and the windows were open. Suddenly, I made a real finding: a dove was just standing less than one meter in front of Klaus, but he had not realized its presence because it was completely static, like a stuffed bird. Then, while pointing with my finger to the animal, I asked: Ausgestopft ? (Stuffed?). He became instantly aware and jelled very loudly jumping backwards like a spring. Remarkably, and unlike me, the dove was not very impressed and it left the place without any hurry shortly afterwards.

There is also a nice story from those days. My wife Dolo (at the time also in Jülich) and me were invited to some bike excursion organized by Klaus, his wife Anne and some other people including some friends of theirs as well as some physicists from IKP. It was a sunny spring day in Juelich. As we were climbing any hill, the more trained German bikers were ahead of the pack with their lively, half-martial but efficient pedaling contrasting with the relaxed pedaling of the rest. Klaus would often be leading. There was a moment of great excitement when, while taking a rest, some members of the expedition discovered a dead Hedgehog in the forest. There were all sorts of remarks about this because the Hedgehog was also the name of the variational ansatz that we would daily use in our Chiral Soliton calculations. Despite being a dead animal, I considered this event as a good omen.

In a similar occasion we went to the house of some friends of Klaus, a married couple, who, after kindly offering coffee and cake to all of us, played a baroque flute and keyboard duet in front of the visiting audience. The performance lasted for about an hour. When it was finally over, the visitors retook their conversations. Klaus got interested on the keyboard instrument, an antique one, and started to play it, quite casually, as if for the first time. He was just pressing the keys first slowly and, after quickly gaining some suspicious confidence, he increased the tempo and played quite proficiently. Of course, most of us were speechless by this improvised baroque concert and his, till then, hidden gift to us.

I have a weakness for emotionally intelligent people. He understood immediately that I only wanted to talk the German language, at least if only German natives were around. This allowed me to learn much faster, particularly the technical quantum mechanics, nuclear physics and field theory jargon (always of course with the help of the German translation of Landau-Lifschitz or Bjorken-Drell textbooks). This has been very helpful even back in Granada, since I have a bunch of German students, and I can be faster than their checking in the Spanish-German dictionary. Unfortunately, I could not be as good as our Emil Nikolov who was the only one speaking "without making a single mistake". Klaus would, to my distress I must say, emphasize this any time Emil was the subject of conversation. This linguistic immersion and personal acceptance made me change my mind and erased many prejudices I had along the five years that I lived in Germany. As Christo Christov once said while I was lightly making the usual and trivial complaints about the country: Aber Enrique, Deutschland ist deine zweite Heimat !! (But Enrique, Germany is your second homeland). I could never have phrased it so clearly. For good or bad (who cares?), I have always felt like this and Klaus has decisively contributed to this feeling. A corollary of this was that when I was married I got from the Institute members the big

**Duden Dictionary** and a facsimile edition of the original Grimm Brothers Fairly Tales when I left Germany as presents, completely targeting and unveiling my expectations. I keep these two books in my shelves as cherished representatives of the symbiotic state of mind and complicity that was achieved after the years with my second-compatriots.

Human understanding and empathy are key issues in personal as well as professional relations. At the time I was in Bochum doing my PhD, my wife Dolo was in Vienna, more than 1000 km away, doing her PhD too. I would take the night-train every four weeks and stay there for ten days. Klaus allowed me to do that, since he realized that work was being done. Several papers based on work with Klaus were written in these trips, but this was also partly possible because I felt a lot of support from my PhD supervisor. Seen with the perspective of the elapsed 20 years I realize that not every boss would have accepted such a situation in the same positive way.

This does not mean that he gave in for free easily. As an opponent, he is a hard and skillful negotiator in all respects; all arguments must be displayed and all cards must be shown. But the rules or the game do not change with time, and he admits openly when you win. The dynamics of the discussion is such that the moral legitimacy of the final decision becomes hardly questionable. The training in discussing scientific matters is invaluable as well.

As a collaborator, one of his favorite games is playing “*Advocatus Diaboli*”, trying to be as destructively self-critical as possible, anticipating the reaction of other, less biased, people. This is meant to correct the natural trend to agree among collaborators. Therefore, his attitude always was to encourage me to speak up freely “*Im Klartext !*”; regardless how harsh I would be in my views (believe me, I was), he would always react positively to the requested sincerity and would of course draw his own conclusions for the benefit of the team. This freedom of speech as well as the real and virtual dynamical confrontation technique opens up all possible ways of communication and complicity, and to me this has been another great lesson from Klaus.

Having a good sense of opportunity is quite different than being an opportunist and much more elegant when properly combined with strategic intelligence. I remember when I was finishing up the PhD which was to be written in three weeks. The reason was that I told Klaus that there was a temporary position offered in Granada which could eventually have a follow-up permanent job. The problem was that there was a given deadline and the waiting time was much longer. He **INSISTED**, with the right instinct, that I should make all possible efforts to get this position. He found out a natural but unforeseen legal interpretation which convinced the Dean and the Rector, who knew about this position, that the waiting periods could be shortened to three weeks. Within the stipulated time I could hand over my version. It has plenty of typos, but I am happy that I could spare the traumatic experience of writing down the thesis in the standard hamletian nirvana of six months that it usually takes. The evening before the deadline, Klaus came to my office just to see how the, by then mandatory, German introduction was evolving. It was clear to him that I could not finish this on time myself. He is a fast typist to the level of having won competitions with the secretaries in Jülich. After few hours, around midnight, the text was typed while I was assembling the figures. Just in time. Finally, the day of the defense, I was wearing a

stylish jacket, according to my usual dressing standards which are not high. I put on the jacket when the jury allowed me to start. I cannot forget the skeptical and ironical face of Klaus reacting to my debatable sense of protocol. After the event, there was a party in the institute, with a follow-up dinner at the Uni-Center very late in the night. This has been the closest thing to a Gypsy wedding I have experienced in Germany. Unfortunately, all the efforts of the Ruhr-Universität, Klaus and myself were in vain since the Spanish committee did not see any need to recognize the thesis until one year later. Of course, I lost the job. Only by a lucky chance the position was still vacant and I could finally get it. I learned, though, the lesson from Klaus that one could and should profit from such good opportunities, because most often they might not present themselves twice. Unexpectedly, I also learned on a kind of flexibility of the German system and the indispensable involvement of individuals.

The first summer I returned to Bochum after having been one year back in Granada, it was 1991, my mother died. I was phoned by my sister in the morning at about 9.00 am. I communicated this to the people at the institute and hesitated what to do. Then, the German efficiency machine worked at full performance, commanded ideologically by Klaus. EVERYBODY at the IPTII volunteered to help, convincing me to go to the funeral, buying the plane ticket, taking me to my flat in Bochum to pick up things, driving me to the airport, .... I was dispatched in Almería, my home town, at 9.00pm, and attended the funeral. Almost 20 years later this is still about a record and an example of solidarity which I will never forget. It also gives an idea of the kind of atmosphere dominating the Institute those days, and shows the kind of things that can happen when people have their heart at the right side. When I secretly spy the pictures in the Web page of the IPTII I feel the healthy jealousy that, in this regards, things do appear to be the same. I have no doubt that Klaus with his smiling face, sense of humor and open character stimulates much of the good mood.

There is a common and not too infrequent suicidal-like trend in young PhD students of annihilating themselves in the most stupid but efficient way. I was no exception. I do not know what he might have seen in me, but he gave me basically total freedom, another sign of his emotional intelligence, since I felt very comfortable in such a situation and gained self esteem. It is no secret that this is exceptional in the German university tradition. I must admit that sometimes he looked much worried with my attitude. After having supervised several PhD students myself my puzzlement has turned into full understanding. I also vividly remember a few times when I was having the standard and exceptional existential doubts. Klaus would just stop his activities all of a sudden and without any hesitation would take his time (it could be hours) to be comprehensive and make useful and respectful advice. This has decisively helped me in trying to achieve an acceptable balance between personal and professional matters.

Running successfully an Institute at University requires good management skills. Here is where I have seen Klaus at his best, writing proposals, triggering money, hiring new people, bringing visitors and, of course, doing interesting physics as well as attracting good students. There is also a crucial aspect on his professional attitude that makes Klaus promote to a new, yet non-existing, category of C-5 professor: To recognize your limitations, to push your limits and to

maximize your utility to your coworkers. These have been key aspects in the development, growth and output of his group. The huge list of current and former collaborators and PhD students at ITPII in Bochum, to which I have the great honor to belong to, is one proof of the significance of his views. Many people, including myself, have profited from his skills not only in Bochum but elsewhere in Germany and other countries.

Dear Klaus: I would like to think that, in addition to your personal charm and intellectual strength, the present of unconditional gratitude from your former pupil will be of some use after your formal retirement. In my modest view your example, side by side in the past and from the far distance now, has produced inspiration for “generations of PhD supervisors”. Most of us have had the privilege of enjoying your friendship in this long path which we call life. I find no better way of concluding this letter than by recalling the universal poem of Antonio Machado (1878-1939)

Caminante, son tus huellas  
el camino, y nada más;  
caminante, no hay camino,  
se hace camino al andar.  
Al andar se hace camino,  
y al volver la vista atrás  
se ve la senda que nunca  
se ha de volver a pisar.  
Caminante, no hay camino,  
sino estelas en la mar.

Wanderer, your footsteps are  
the road, and nothing more;  
Wanderer, there's no road,  
the road is made by walking.  
By walking one makes the road,  
and seeing behind the vista,  
one sees the path that will  
never be travelled again.  
Wanderer, there's no road,  
only waves in the sea.

Wanderer, sieh, deine Spuren  
Sind der Weg und weiter nichts.  
Wanderer, es gibt keine Wege,  
Den Weg mache ich indem ich ihn geh'.  
Indem ich geh', mache ich einen Weg  
Und rückwärts wende ich den Blick,  
Damit ich den Pfad, den ich nie  
wieder einschlagen werde, seh'.  
Wanderer, es gibt keine Wege,  
Nur Kielwasser auf hoher See.

Let us walk new roads and leave the waves behind !!

Granada, 15 March 2009