

## Tilman D. Märk: a personal foreword

When I looked at the list of contributors to this Special Issue honoring our friend and colleague Tilman Märk, I realized just how many of my colleagues have known Tilman for much longer than I have, and have collaborated with him for much longer than the 10 years, that I have had the privilege to work with him and his coworkers. I had, of course, been aware of Tilman's work long before I came to Innsbruck for the first time.

My first visit to the Institut für Ionenphysik in the Spring of 1993 was initiated by Hans Deutsch of the Universität Greifswald, with whom I had a collaboration since shortly after the fall of the Berlin Wall. Hans, who had been a Guest Professor at the Institute and a close collaborator of Tilman's since the early 1980s, suggested to Tilman to invite me to Innsbruck to give a talk on "Electron Impact Ionization," the next time I was to Europe. That came about in early 1993 when I visited other collaborators in Greifswald, while Hans was in Innsbruck. I recall leaving Greifswald by car on a rainy and foggy evening and driving overnight for many hours, to Berlin, around Berlin, to Munich and around Munich, encountering more road construction on the way than I ever thought possible. I finally reached Innsbruck around 10 am the following morning of an absolutely gorgeous and crisp day, snow on the ground, blue sky, and an intense sun trying to raise the temperature to above the freezing mark. I toured the various labs at the Institute and gave my talk. The talk must have gone well, because Tilman asked me to give an invited talk at the SASP meeting the following year, in a session chaired by Hans Deutsch. This SASP in 1994 was the beginning of a beautiful and successful three-way collaboration and friendship.

My first Guest Professor stay in Innsbruck followed in 1995 and it was coordinated with Hans Deutsch's stay. I was immediately taken by the unique atmosphere in Tilman's group, that very special combination of personal warmth and intense scientific drive. It was a very productive stay and served as the foundation for a scientific collaboration and personal friendship amongst the three of us that is second to none. Many other Guest Professor stays followed, almost always arranged in such away that both Hans and I came to Innsbruck at the same time, often two or three times per year. The scientific productivity of our collaboration is apparent from Fig. 1. It shows the number of publications (papers and conference abstracts) per year from 1994 through 2003

that list Deutsch, Becker, and Märk (D–B–M) as co-authors. Since 1995 this number has fluctuated around 11.5 and, remarkably, it held steady after Hans Deutsch retired and after I assumed the administrative duties of Department Head at Stevens. All three of us are committed to do our best to maintain this level of productivity, even now that Tilman has accepted the time-consuming administrative position of Vice-Rector for Research.

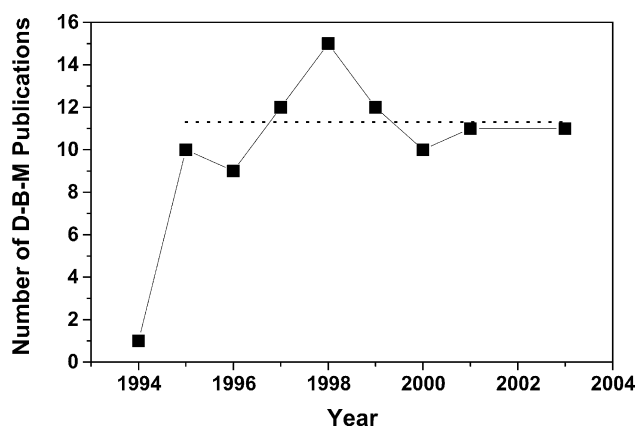


Fig. 1. Number of joint journal and conference publication co-authored by Deutsch, Becker, and Märk (D–B–M) between 1994 and 2003. The dashed line indicates the average number (11.5) of publications between 1995 and 2003.

There is, however, much more to my relationship with Tilman than our high level of scientific productivity and our mutual respect for each other as fellow scientists. We have become very good friends over the years, who share many passions outside of science such as opera, music, theater, interesting restaurants, good food and wine, the company of stimulating people inside and outside of science. Above all, we have always managed to combine serious and productive science with having fun, which, in turn, provides a great stimulus to do even more and better science. I recall how Paul Scheier once organized a "Rodelpartie" with Tilman, Hans Deutsch, Helmut Schwarz, Sara Matt, and me—the English expression "sleigh ride" does not even begin to describe our adventure! We walked uphill for an hour and a half carrying three sleighs and then embarked on a 20-min downhill ride on a track whose shady sections were pure ice and whose sunny sections had large patches of bare concrete

covered with patches of water. I will not describe all details of the ride, but I will mention that not all of us made it down on their sleigh, some got down on the bottom of their pants. Afterwards when we had a well-deserved lunch in a near-by ‘Gasthaus,’ the distinguished Professor Dr. T.D. Märk entered the place in his colored, long underwear. Most people there took it for the latest in winter sports fashion and did not even raise an eyebrow. Many other memorable events followed, a few wonderful days at Tilmann’s house on Corsica, an IAEA meeting in Vienna, where Tilmann and I ended up by an incredible stroke of luck, with front-row seats to the “sold-out” opening night of Bellini’s ‘La Sonnambula’ at the State Opera, woefully underdressed among a mostly black-tie audience, but enjoying every minute of the performance.

If there is one thing about my friendship with Tilmann that I regret, it is the fact that I have not been able to adequately reciprocate the wonderful experiences I had with Tilmann in Innsbruck and in other parts of Europe on this side of the Atlantic. Tilmann’s preference to stay on ‘terra firma’ has so far prevented me from extending a similar hospitality to him in New York. *Tilmann, that set of tickets to Wagner’s Ring at the Met conducted by James Levine is still waiting !!!*

Many Special Issues of this journal honoring colleagues or commemorating events only exist because Tilmann took the initiative to propose that Special Issue and served as its Guest Editor. When the time came for a Special Issue honoring Tilmann on his 60th birthday, we (Helmut Schwarz, Paul Scheier, Alex Stamatovic, and I) found a reluctant honoree at first, whose initial reaction was a desire to ignore the occasion rather than celebrate it. However, we were four against one and, in the end, Tilmann did not stand a chance. It was a great pleasure and a privilege for me to serve as

Guest Editor for this Special Issue together with two other long-time colleagues and friends of Tilmann’s, Paul Scheier, and Alex Stamatovic. The response to our call for contributions was overwhelming. I would like to thank all authors for their high quality contributions and all referees for their willingness to review the manuscripts, often on short notice and with short turn-around deadlines, as well as for their constructive reviews that helped turn good papers into even better papers. The diversity of topics covered by the papers in this Special Issue is a reflection of Tilmann’s multiple scientific personalities and a tribute to the many fields in which he has worked. Furthermore, the number of references in the various articles in this Special Issue with Tilmann as a co-author is a testimony of the impact his work has left in each field he has entered.

Dear Tilmann, I treasure those 10 years that we have known each other as colleagues and friends and I am looking forward to many more years of the same. I wish you a very Happy 60th Birthday and I hope you will have as much pleasure reading this Special Issue as we had putting it together.

Lastly, on behalf of all three Guest Editors, I would like to thank Helmut Schwarz for his support for this Special Issue from the beginning and I would also like to acknowledge the publisher of the journal for their cooperation throughout the process and, foremost, for allowing us to publish such a multitude of articles in a single journal issue.

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