## Kind Memories of Yakov Nikitin E. Hashorva

Asymptotic Efficiency of Nonparametric Tests, an excellent manuscript, is my first contact with the mathematical works of Yakov during my PhD studies at University of Bern. Reading was a great pleasure in the superb library of University of Bern at Ex-Wi building. Particularly interesting were of course the new arrivals at the library. Purchasing a nice book was not a real option, typically books were by default copied, often in parts, which compared to the speedy downloading from internet, quite common nowadays for all of us, was at those times a headache. Well, around the end of 1997, the book of Yakov just appeared in the shelf which I looked at very often. It was a pleasure to read that book, which soon entered my list of the special math books. In fact, one could easily borrow books from library just by filling some standard paper. Since it was a single copy, I decided to read it in the library.

Indeed, it is a very impressive book, very deep, very nicely written and very high mathematics.

Thereafter, from time to time I saw publications of Yakov; of particular interest for me were the works related to small ball probabilities. I have the impression that Yakov asked me in few instances to review some papers on boundary crossing probabilities, which was a topic of interest for him.

Well, at this point I deeply regret that when we met in person we never spoke about the book. I mentioned in the talk I gave in Lausanne, that my career has been influenced by their books, where I meant the book of Yakov and one of Misha Lifshits. I should have made the comment more explicit, mentioning both those great books!

The first electronic contact was after I asked Yakov by email to write a recommendation letter for one of his students. Promptly I received a very detailed one, from which I understood two things:

- a) he loved mathematics,
- b) he was a true leader who wanted his excellent students to progress.

Let me explain about a): In his recommendation letter Yakov mentioned that those students approaching me were not only performing good at university, but they studied at Lyceum No.239 where also Perelman studied. I did not know anything about Lyceum 239, but I knew about Perelman.

Point b) in fact is something that I observed several times later on. When we met in St. Petersburg, Yakov kindly suggested two excellent students for eventual PhD positions at University of Lausanne. We had several email exchanges too about that. Unfortunately, there were no open position at that time. Yakov did not give up and was actively looking during the workshop in St. Petersburg to find

other possibilities to help those students for their PhD studies. Also on March 11 2020, Yakov suggested me another strong student that was interested in writing a PhD thesis. Since I wanted to keep the promise I gave to Yakov, I did contact that student on June 28th to offer him the PhD position. From several emails with Yakov I believe that he liked French a lot. Even the name of the aforementioned student Yakov translated in his email as Jean Dieudonné!

We met two times in person, once during his visit to Lausanne and the second time during my visit to St. Petersburg. When I first met with Yakov I was surprised since he was much younger than the "old Russian mathematician" which I had imaged in my PhD studies. It was a pleasure for me and of course a great privilege to meet Yakov personally in Lausanne. There were several other mathematicians from St. Petersburg taking part in the workshop, so very unfortunately, we did not spend much time together. From our conversations I know that he was very fond of arts and in particular of painting. During his short stay in Lausanne he also visit some interesting museums there.

For me Yakov was always a genuine gentleman, an integer personality and very trusted person in any respect.

Yakov was a leader with excellent organisation skills, he cared for every single person. The workshop between Lausanne and St. Petersburg universities which took place in St. Petersburg was excellently organised by him.

Yakov was a great speaker. During the workshop in Lausanne, he gave a very nice talk which was also digestible for the young mathematicians that were attending.

It is a great pity that I stayed only one night in St. Petersburg. Yakov knew my restrictions and suggested that next time I should definitely stay longer.

When I arrived in St. Petersburg for the workshop, we went straight to the restaurant for lunch, where all the participants of the conference were. I joined Yakov there for lunch. He carefully introduced me to many other participants. It was an excellent occasion for me to see and meet so many great mathematicians, some of them I knew from their papers.

They were all very kind, modest and in my definition, indeed true mathematicians! After the workshop in St. Petersburg we remained in contact through emails. Yakov was trying to organise other meetings and so did I and our friend Krzys Debicki. We came up with the idea to encourage young talented Russian students and researchers by organising workshops at Bedlewo conference centre in Poland, an excellent place for research.

Yakov was very happy with that idea and so he became the key contact for the Russian group to come to the workshop. Due to COVID-19 the workshop was unfortunately cancelled. There was a new possibility for a grant application last spring, which I engaged with together with Dima Zaporozhets. We were both



Christmas picture received from Yakov, 21/12/2019

enthusiastic to attract Yakov to be part of that project, which he kindly accepted. Covid came and things got complicated for all of us. The loss of such a great friend and colleague was a big shock, in many respects. We had so many email exchanges and so many projects planned.

It is too sad to lose friends and colleagues. Indeed, it is very important to keep the memories alive. At home, in the room of our youngest daughter I spotted a very nice gift Yakov brought to me when he visited Lausanne. She likes it a lot and I do go now to see it from time to time. There are a lot of lessons I have learned from such a great friend, teacher and colleague.

We all miss Yakov a lot!