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SRISHTI DHAR CHATTERJI, MY PH.D. ADVISOR

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The sudden death of my former Ph.D. advisor has touched me particularly. I will refer to him as to *Professor*, as this is how I addressed him up to the last time that I wrote to him. As I have mentioned to Prof. Veerava Varadarajan, Professor was a father figure; indeed, he passed away shortly after my own father, which has left me with a strange feeling. When I was young (and a student at EPFL), I was also looking for such a figure: a “scientific father” in whom one can have confidence, but who would also challenge me to give the best of myself.

I was introduced to him by Prof. Renzo Cairoli with whom I wrote my Diploma (Master) thesis. At the end of my undergraduate studies, I was briefly interviewed by him in view of being hired as a Teaching Assistant and Ph.D. student. During this interview, Professor conveyed essentially two concepts to me:

- (i) Even though my contract would stipulate that I should work for 44 hours a week, the same as all Swiss federal employees, he indicated that, stimulated by the joy of mathematics, I would certainly work much more, and at least 60 hours.
- (ii) He also mentioned that many of the properties appearing in the stochastic analysis of Gaussian processes should be generalized to the case of Poisson processes (or measures), and this could be an inspiration for my Ph.D.

I was quite frightened upon hearing this; the amount of work seemed enormous to me and the research program appeared to be outside of my capabilities. However, first of all, he was right in the sense that at some point it was unavoidable for a mathematician to work more than 44 hours per week. Secondly, later developments in stochastic analysis would show that many features of Gaussian stochastic processes would find analogous aspects in the Poissonian world. However, at that time, I was young and I needed to savour my youth with parties at the beach, friends, sport and so on.

My Ph.D. years at EPFL were beautiful years. Beyond what I could learn from Professor, the atmosphere in the Department was extremely pleasant, and I enjoyed good relations with the other young colleagues

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and the other Professors. The mathematical interaction with Chatterji was impressive; when he stated general results in analysis, functional analysis or probability theory, one could be confident that his statements were very reliable.

As mentioned above, during my thesis years, I was also his teaching assistant, so I was involved (along with others) in helping his students during the problem sessions. I was involved with the following courses: Analysis III (second year), Integration and Measure, and Theory of Probability and Stochastic Processes (third and fourth years). His courses were perfectly organized and completely rigorous. I learned a lot during the teaching discussions. One example which impressed me and that I learned from him: the space of smooth test functions with compact support in \mathbb{R}^n is dense in $L^p(\mu)$ for every Borel σ -finite measure μ , and not just when μ is Lebesgue measure.

The last time I met him was during the *Ascona Conference* entitled *Stochastic analysis, random fields and applications* that Robert Dalang, Marco Dozzi and I organized in Spring 2011. He was there for a few days and he expressed a (partially unexpected) affection and consideration, highlighting my person in front the participants the conference.

Beyond the nice souvenirs, I have one regret: I was so much involved in my Ph.D. dissertation that I did not take enough advantage of his wide knowledge in probability in Banach spaces and convergence theorems in the context of exchangeable random variables, in which he was a great leading expert. Indeed, during the last ten years, an important part of my research activity (on stochastic integrals in Banach spaces and propagation of chaos for interacting particle systems) would have considerably gained from scientific discussions with him about those subjects during my doctoral studies.

I really wish that I could have properly said goodbye to him.

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