

Peng in Dublin *

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In February 1946, I arrived at the Institute for Advanced Studies, 64 Merrion Square, Dublin. I was greeted by Peng H W and Hu Ning (known as Ning Hu). Arriving from war-torn France, I was bewildered by Ireland, and assumed that Peng and Ning Hu were Irish!

They took me to Professor Heitler, recently appointed Director of the Institute, upon the resignation of Professor Schrödinger as Director because, so I was told (possibly a joke but I believed it), he would not accept that his waste paper basket be emptied daily.¹⁾

Heitler had contacted Frederic Joliot when communication with France had been reestablished at the end of World War II, and asked him to suggest someone interested in joining the Institute.

Joliot asked me if I wanted to go to Dublin. This opportunity could not have been more timely for me. I had joined Joliot's lab at the College de France in October 1944, and had realized the chasm between current research in theoretical physics in France and the work carried on in the U. S., Canada and the UK. I had also realized that I was awfully unprepared to serve as the "house theorist" Joliot wanted for his lab. I readily and enthusiastically accepted Joliot's offer. As quickly as postwar regulations permitted, I was in Dublin.

After greeting me, Heitler asked me about my research project. I had none; I only had a BS and MS earned conscientiously but without motivation. Nevertheless, I felt that I had to appear professional. On the spur of the moment I made up a research plan, creating it as I was going along. After awhile, Heitler, with a warm, fatherly look, asked me if he could suggest a topic. I was delighted and I readily agreed to compute meson production in nucleon-nucleon collisions, using the theory of radiation damping.

Back at my desk in the lovely "scholar" room, with its blue carpet and turf fire, I stared at my notebook, not having a clue how to begin. As I looked up I saw

the friendly face of Peng. He got me started, and through the next year clarified my confusion, suggested new approaches in apparently intractable situations, and checked my calculations. Peng's guidance awakened in me a lifelong interest for Physics. I dedicate to him whatever has come afterwards.

By 1947, I was the proud coauthor with Peng of two papers:

· "Cross sections for production of artificial mesons," *Nature* 160, pp 59-60 and

· "On the production of mesons by nucleon-nucleon collisions," *Proceedings of the Royal Irish Academy*, 51A, pp 217-237.

In March 1947 I received a "Doctorat d'État" from the Université de Paris, having submitted a dissertation on "Contribution à l'étude des mésons - création de mésons par un choc nucléon-nucléon" and a review paper on Heisenberg S-Matrix. This paper was largely inspired by Ning Hu's work on the formulation of bound states in the scattering matrix.

The Institute at Merrion square was in a lovely Georgian house overlooking a private park for the residents. There was a tennis court. A few times Peng invited me to play tennis with him. Although right-handed, he would use his left-hand to play at my level. Life at the Institute was enchanting. A small group of "scholars" shared a beautifully appointed large room. Morn-

* 本文作者 Cecile DeWitt-Morette 是美国得克萨斯大学物理系教授,也是对第二次世界大战后法国和欧洲物理学的发展起了很大作用的 Les Houches 暑期学校的创始人。1946—1947 年期间,她以实习生身份从法国到爱尔兰都柏林进修,得到时任爱尔兰都柏林高等研究所助理教授的彭桓武先生的指导。本文是她为庆祝彭先生 90 寿辰而写,文中谈到彭先生对她走上物理学研究道路的影响和当时也在该所工作的胡宁先生对她的帮助。2005 年元月她专程从美国来拜望彭先生时,带来她珍藏的都柏林时期的历史照片送给彭先生,并将当年胡宁画的一张油画回赠胡宁先生夫人,表达她对二位先生的感谢。——编者注

1) 据 W. Moore, *Schrödinger-Life and Thoughts*, Cambridge University Press (1992) 416 页所述,确有其事。——编者注

ing coffee and afternoon tea were the occasions for Heitler , Schrödinger and Peng , who had their own offices , to join us.

One day , Heitler brought at coffee time a picture of a particle decaying into two other particles that he had received in the morning mail ; he helped us guess its meaning : it was the first picture of a pi - mu decay. Until then it had been assumed that the particle responsible for nuclear forces and the particle recently ob-

served in cosmic rays were the same particle. Imagine the contortions of theorists trying to fit together whatever scant information we had then on the pi and the mu mesons. The most often chosen scheme was the Møller and Rosenfeld mixture , a combination of pseudoscalar and vector mesons , the mixture Peng and I had been using.

Below are a few pictures of life at the Institute in Dublin.



1 Bicycles : On bicycle : Peng and Cecile Morette. Watching : Pappetrou on the left , HuNing on the right.



2 Group : Left to right : Hu Ning , unknown , woman holding the fruit was a secretary (possibly Miss Green). Back : Sheila Porver , Peng , Cecile Morette.



3 Friends : Back row , left to right : Hu Ning , Cecile Morette , Peng. Middle row , left to right : Sheila Porver , secretary (Miss Green ?) , unknown. Front : sister of Prof. Heitler



4 Peng on the top of hill

Peng went back to China.

Nearly sixty years later , it has been a great joy for me to visit Peng in Beijing. I am honored to contribute to the special issue of Wuli celebrating his ninetieth birthday.