

## Speech at retirement of Hans Peter Lüthi

To appreciate Hans Peter Lüthi's work at ETH from the very beginning we have to displace ourselves into the 1980s. The mainframes of the Computer Center of ETH were quite outdated, while in the United States the National Science Foundation established five powerful Supercomputer Centers. The only supercomputer in Switzerland was a Cray-1 at EPFL, a machine introduced in 1976 and bought as a second-hand offer from Electricité de France. So it was quite outdated as well. It was clear that something had to be done, but it took years to sort out which make and model should be bought, how it should be paid, and where it should be installed. The fact that the Swiss Parliament accepted a bill providing 40 million Swiss francs for a Swiss National Supercomputer came a bit late and made these questions not simpler. Anyway, in 1988 ETH Zurich got a Cray X-MP/28 and EPFL a Cray-2. Three years later, in 1991, a NEC SX-3/22 was installed in Manno.

What was still needed was a technical user support group. EPFL already had one, called GASOV. And on a national level, there were workshops organized by a group called "Speedup". After the first such workshop, entitled "Supercomputing — The State of the Art" and featuring a talk by Jack Donarra (who else!), [which took place in Berne on November 20, 1987, ] Prof. Carl August Zehnder, then a Vice President of ETH, suggested that we establish such a support group. We called it "Interdisciplinary Project Center for Supercomputing", and we were initially granted 12 positions, available from July 1988. [Due to personnel limitations that hit ETH soon after, we actually only got 10.4 positions.] It was soon clear that Hans Peter was our man for chemistry, and that he would be the deputy director. The official deal was that the scientific staff could spend 50% of their time for research, but my interpretation was that those who were particularly successful and provided extra work force could invest more time for it. This worked out perfectly, perhaps too good. In the initial years our research output was larger than that of the whole CS department. Of course, this was only possible due to numerous research grants Hans Peter and some of the other staff members acquired. However, I am sure that through our success in research we not only made

friends.

But we also provided priceless know-how. Not only on how to use vector and parallel computers, but for example also when it came to procuring or upgrading supercomputers. Already before the IPS was established, several of us were involved in the evaluation of the machine that was chosen to be the Cray X-MP/28. Without us the ETH computer committee most probably would have chosen an ETA-10 computer. ETA promised very advanced hardware, but their software was a disaster. And, in fact, their mother company, Control Data Corporation (CDC), decided to shut down ETA in April 1989, less than a year after our Cray X-MP was installed.

Regarding C4 and its initial IBM 3090 I cannot say much. IBM had their own way of selling this machine, and as far as I remember, there was no RFP (request for proposals). But I claim that IPS was responsible for the machine to offer Unix as an operating system option from the very beginning. [My boss was furious when this request came up just before the contract was ready for signing. Fortunately he did not know that I had suggested it to his boss, ETH vice president Ralph Hütter.] Running Unix on the 3090 was consistent with our running Unix on the Cray, a decision that had been based much on the advice of IPS staff member Wesley Petersen.

But let me now come to the object of this talk, Hans Peter. Before he came to ETH he had acquired in Norway and in the US a lot of experience with large mainframes and supercomputers. He was a good proposal writer, a successful paper author, and, I think, an excellent advisor for his PhD students and his postdocs. As you know, some of them turned out to be very successful. IPS profitted also from Hans Peter's networking abilities. Fortunately, he also excelled in areas where I was weak, like in live interviews. Although I may never have told him that, I always considered him to be our press secretary. I brought a recording of one of his actions with me. [Play excerpt of MTW.]

Finally, let me wish Hans Peter all the best for his retirement. Stay happy and healthy!

Martin Gutknecht / 8.6.2017