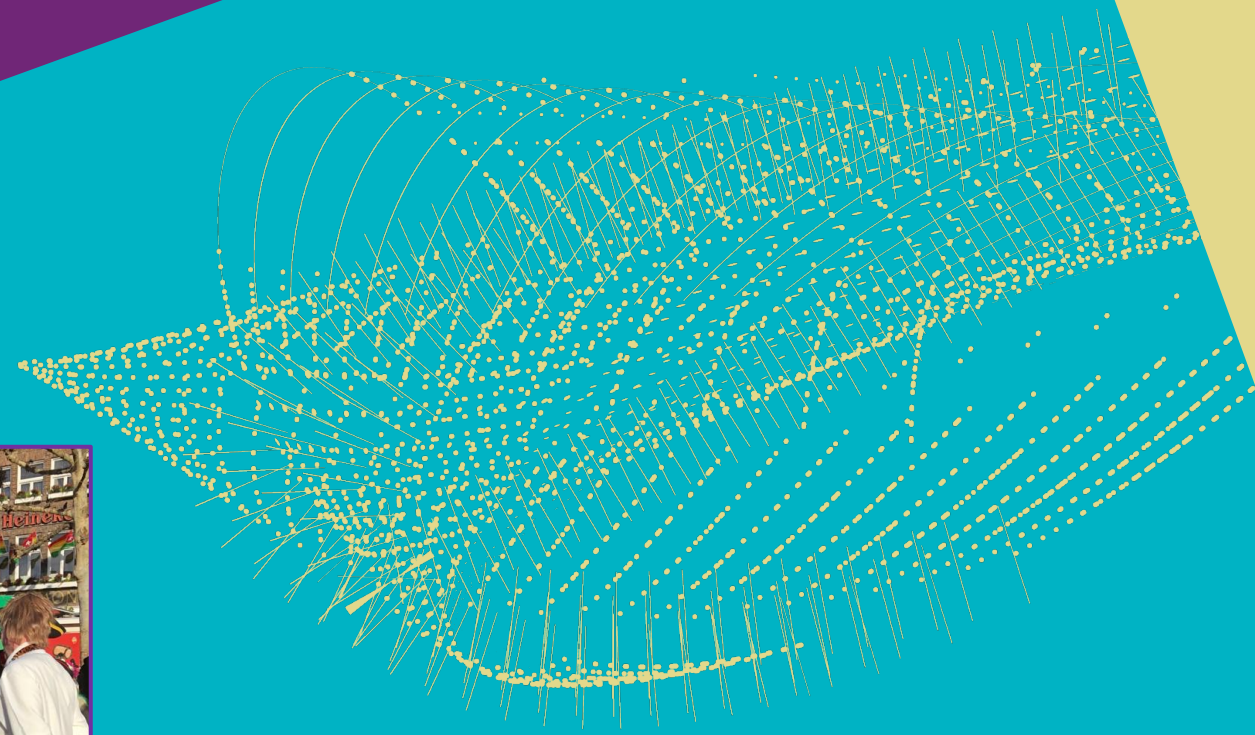


3rd Postdoc Jamboree



Marcel Merk: “be yourself”



- Maastricht (1964 – 1982) Childhood and School
 - Want to become professor in Astronomy (together with E.L.)
- Nijmegen: Study (1982 – 1987) and PhD (1987 – 1992)
 - PhD: L3 Experiment. Highlight: testbeam and cabling E.M. calorimeter
 - Work: *very long hours and very inefficient*
 - Had a great time: *Wrote 0 papers*
- Postdoc-1: Carnegie Mellon University @ CERN(1992 – 1995)
 - Si strip Luminosity detector and analysis: *highlight in my career! Loved it!*
 - *Wrote one limited authorlist paper and had a very visible plenary CERN presentation*
- Postdoc-2: Nikhef: Delphi and LHCb (1995 – 1998)
 - Never really got into Delphi. Doing two projects was inefficient
 - Lesson for me: *better focus on one project than doing two “half-half”*
 - *Contributed visibly to LHCb TDR, but wrote 0 papers*
- KNAW fellowship Utrecht (1998 – 2001)
 - HERA-B and LHCb. HERA-B was unsuccessful small-scale hardware project. Did not have sufficient technical back-up from university.
 - *Had fun in LHCb on detector and performance simulations*
- Nikhef staff (2001 – 2021)
 - Staff-member: Detector optimization and tracking studied in LHCb. *Quite visible in the LHCb collaboration.*
 - Group leader bfys (2004) and country representative
 - “Special” professorship VU
 - *Never really published many papers*
- Half-time Nikhef + Half-time Maastricht (2020 – now)
 - Trying to find balance work-life.

- During PhD:
 - Was asked to help the Princeton group with L3-BGO data acquisition electronics – accepted that (slave) job.
 - Work with them made me known in the collaboration and resulted in three postdoc offers without applying(!).
 - Accepted CMU as it was small group with nice hardware+analysis project (Luminosity monitor).
- During 1st Postdoc (CMU)
 - Choosing “boring” L3 luminosity analysis (few people) over “exciting” B-physics (many people) project:
 - Gave me a lot of visibility as “the expert” on DAQ and data analysis.
 - My CERN PPE seminar presenting the L3 luminosity result gave very much visibility (not many other talks).
 - The Luminosity papers (~30) authors as well (I was one of three main authors).
- During 2nd Postdoc (Nikhef)
 - The fact that I joined a complete new project (LHCb) turned out relevant later (I did not know)
- KNAW fellowship
 - I got the prestigious KNAW fellowship because of two reasons
 - 1) Luck 2) very strong recommendation letters from my promotor and Sam Ting
 - I realised later that such a prestigious fellowship implies a commitment for Nikhef later on.
- Permanent position at Nikhef
 - My software work on simulations for tracking TDRs in LHCb (not analysis in Delphi or HERA-B!) was main asset.
 - After one year fellowship I applied at Nikhef. Interview did not go great.
 - Outcome: “thanks but you just started the fellowship – do that first.
 - After two years fellowship (new application round) I went to Nikhef HR and explained:
 - “I started a family and want to buy a house. I’m interested in a job. If it does not work now I go to industry.” Outcome: Got a job.

- What I am looking for?
 - Human skills and Personality
 - Positive (“can do”) mentality
 - Curiosity about physics (rather than “knowledge”)
 - Communication & interest in others
 - Technical Skills:
 - Technical skills: hardware, software, or mathematics
 - Less important:
 - Convenorships, publications, large track record on conferences
- How do I evaluate? In order of importance (1st=most important, 5th=least important)
 - 1st : Personal experience with the person (eg in the collaboration)
 - 2nd : Use of my network (informal opinion colleagues)
 - 3rd : Recommendation letters (difficult!)
 - 4th : Unexpected CV facts and hobbies (electronics/software, artistic talent, fixing bicycles, ...)
 - 5th : Convenorships, papers, talks

Note:

Hard skills → “technical” skills

Soft skills → “human” skills

- Applying is two way traffic:
 - Need to find a match between employer and employee
 - You do not want to be selected on a position where it does not work *for you*
 - Ask honest questions about the position, persons, institutes,...
- CV:
 - **Not a one page** document: I need information (facts) about you.
 - **Do not bragg/oversell**, let the facts speak. (No car-salesman letter!)
 - Apart from main points, do mention smaller achievements/partial responsibilities
 - Examples: “Repaired electronics boards”, “optimized track fit algorithm”, “cabled detector”.
 - Please mention **side activities/hobbies/skills** (more important than you may think!)
 - Examples: “I play with Arduino’s”, “semi-prof sports”, “play chess”, “fix bicycles”.
 - Organise CV neatly, no language or spelling mistakes!
- Write a scientific statement of motivation letter
 - Show who you are – what do you want – why you want it.
 - Don’t write just standard stuff – show you think about things.

- Academia vs Industry
 - There are perhaps equally interesting positions in industry and in academia for you
 - Daily activity may not be so different
 - Salary tends to be better in industry
- So when to consider staying in academia?
 - You want to be part of the overall activity in fundamental science, even if only enabling it,
 - You want to keep thinking about fundamental science,
 - You really enjoy teaching, either doing it or organising it,
 - You enjoy to be active in outreach.
- Follow your heart: do what you want to do **now**
 - Enjoy what you are doing, do not do things because they are good for your CV
 - If you end up doing something else, at least you had a good time
 - Do not underestimate the skills you develop, both technical and by working in international collaborations
 - They are useful outside academia and in life in general

- “Work hard, play hard, socialise and enjoy science”
- Be yourself!