## Federico Zenith Control of Fuel Cells, 2002–2007

SINTEF Applied Cybernetics

August 22, 2015





## After the PhD I went on to...

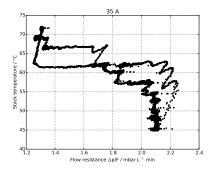
- C++ programmer at Petrell AS (2006–2008)
- Post Doc. at Magdeburg Max Planck Institute (2008–2010)
  - Dynamics and control of DMFCs
  - Small fuel cells for portable power
- Back in Trondheim at SINTEF Applied Cybernetics (2010–2015)
  - Still working on fuel cell control!
  - Other fuel cell projects (forklifts, trains, ...)
  - Also: testing of oil and gas wells (SmartX)
  - Currently I'm a Senior Scientist



## Representative Project: SAPPHIRE

## SAPPHIRE J

- I coordinate an EU project!
- I currently have a 100 % success ratio in EU proposals (1/1)
- Controlling fuel cells to maximise lifetime
- Integration with prognostics (new field!)



Cell diagnostics: low resistance means trouble

