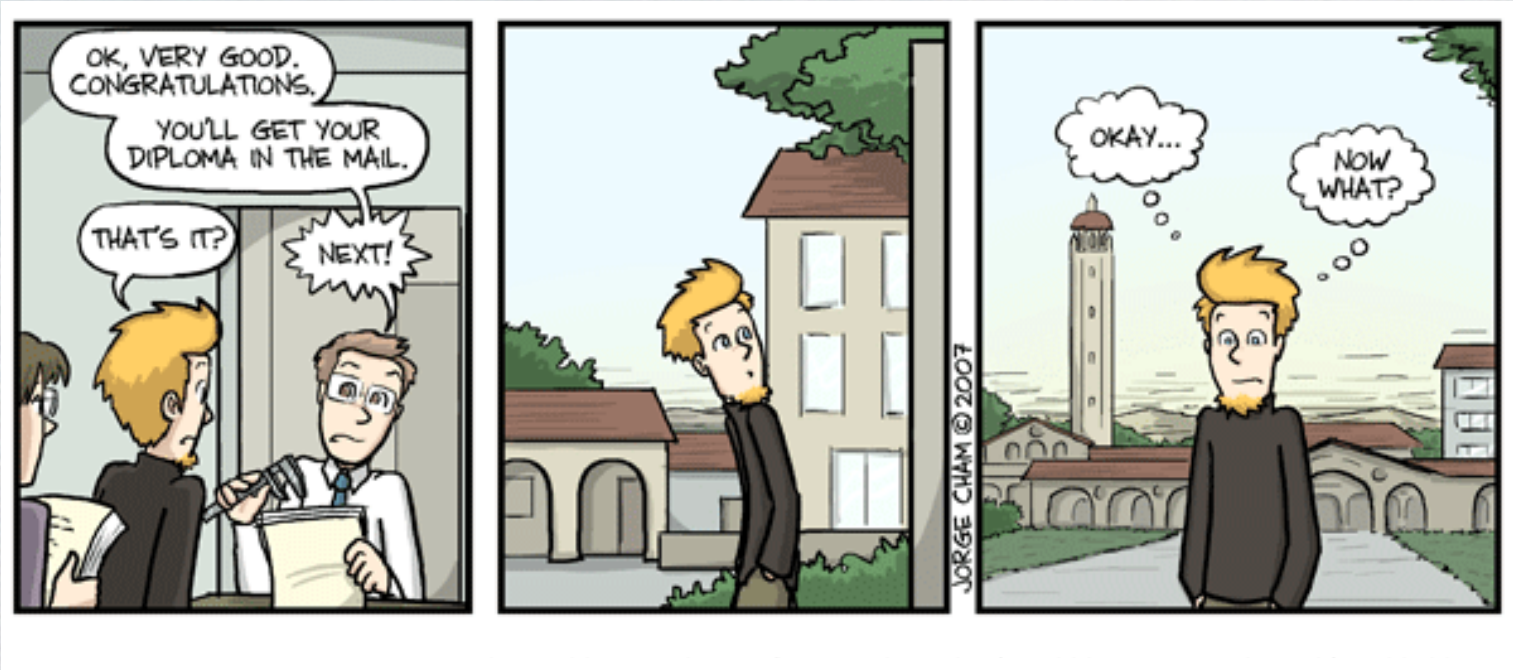
The CNRS recruitment process

The End (of the Thesis) is Nigh



The End (of the Thesis) is Nigh

Thesis

Academia

- Maître de Conférences
- CNRS
- Inria
- ...

Industry – Real World

???

What is the CNRS?

- **French National Center for Scientific Research**
  - Largest fundamental research agency in Europe
  - 26,000 permanent researchers
  - 6,000 temporary staff
  - 47 « sections » of scientific research
    - Section 6: Algorithms, Artificial Intelligence, Operations Research, Telecommunications,...
    - Section 7: Robotics, Signal Processing, Integrated Systems,...
  - International Contest (300 researchers in 2014)
    - Multi-stage selection process
    - « Postes normaux »
    - « Postes flechés »

dépasser les frontières

Important Dates

- **Deadline ≈ 5 Jan.**
- **Multiple positions per section**
  - 2014: 6 entry-level positions in Section 6, and 6 in Section 7
- **3 Milestones**
  1. Groundwork: $\leq D - 2$ months
  2. Research Dossier: $[D - 2 \text{ months}, D - \varepsilon]$
  3. Interview: $[D + \sqrt{\varepsilon}, D + 2 \text{ months}]$
- **Language not an issue for non-French**

Groundwork

- **Easy to ignore – but crucial**
- **Test the waters**
  - Who shares similar research interests in France?
    - Supervisors' help cannot be overestimated
    - Mobility strongly encouraged
  - Potential host laboratories
    - Get ready to give lots of talks
    - Opportunity to discuss possibilities and failsafes
    - Host support key for recruitment
  - Check for « Postes Flechés » in your domain

Research Dossier

- **Not an easy feat**
  - Summary of 3+ years of hard work in a few pages
  - For non-specialists!

1. **Research Summary**
   - What you've done
2. **Research Project**
   - What you want to do
3. **Integration**
   - With whom you want to do it

Part 1: Research Summary

- **Context, context, context**
  - Committee not comprised by specialists
  - Fact: senior researchers usually have the span of a 3-year old
  - Not writing a paper

- **Less is More**
  - Techniques, not technical details
  - Techniques, not technical details

"[*proved*] *by establishing an isometric embedding to a simply connected configuration manifold with quarter-pinched curvature*"

vs.

"[*proved*] *by using tools and ideas from the differential geometry of spheres*"

Part 1: Research Summary

Less is More (cont'd)

- What is the unifying theme of your work?
- Highlights of main achievements can go a long way
  - Jury has many dossiers to go through
  - Overwhelming amounts of information
  - Easier to remember what one understands
- Chronological order not always optimal

Part 2: Research Project

- What you want to do
- Why you want to do it
- How you are going to do it
- With whom you are going to do it

Part 2: Research Project

- **Context, context, context**
  - If proposed research very different from past, explain again
  - How do you build on your expertise?
  - Balance between clarity and technical details
- **Vision**
  - Short-term goals: things you know how to do but haven't yet done
  - Mid-term goals: things you think you might know how to do
  - Long-term goals: things you wish you knew how to do
  - Added bonus: new ideas often come that way

Part 3: Integration

- **Potential Host Laboratories/Teams**
  - Who is working on similar topics?
  - Who can you work with?
  - Are there ongoing collaborations?
  - If research statement relies on work of host, state it clearly – shows genuine interest!

Post-Submission

1. Dossier submitted (D-day)
2. Admissibility verified (admission à concourir)
3. Preselection (admission à poursuivre)
4. Interview (D + 2 months)

Interview

- **10 mins + 5 mins for questions**
  - Time management extremely important
  - Practice makes perfect

1. **Researcher Profile**
2. **Research Summary**
3. **Research Proposal**
4. **Integration**

General Information

- **NOT A CONFERENCE TALK!**
- 20-40 candidates per committee on day of interview
- Usually, at most 1–2 persons will know what you're talking about
- 10 minutes to let the jury know
  1. Who you are
  2. What you've done
  3. What you want to do
  4. How you will do it within the CNRS

Researcher Profile

- **Mini version of CV**
  - 1–2 minutes
  - Studies
  - Scientific Qualifications/Awards/Patents/...
  - Collaborations (beyond supervisors)
  - Service

Research Synopsis

- **Bird's eye view of accomplishments**
  - 3–4 minutes
  - Remember: committee not comprised by specialists
  - Tools/Techniques/Validation important
  - Depth XOR Breadth – not both!
  - Examples are your friends!

Research Proposal

- **Outline proposed research**
  - 3–4 minutes
  - Remember: committee not comprised by specialists
- **Vision**
  - One-phrase summary
  - Use early, use often
- **Proposal**
  - If the vision is relevant, then probably shared by many
  - Proposal: novel take
  - Structure: Objectives + breakdown (short-/mid-/long-term)

Integration

- **Potential host institutions**
  - 1–2 minutes
  - Successful integration of candidate critical to the CNRS
  - Potential/Existing collaborations
  - Links with current institution

Questions

- **You want lots**
  - 5 minutes
  - Chance for jury to get to know you better
  - Questions rarely technical
  - Engage the jury
  - Don't duck hard questions

GOOD LUCK!