

# Life as a PhD candidate

Thoughts and experiences

# About me

## Formal knowledge

- 2008–2013: Master of Science in Mathematics
- 2013–2017: PhD in Mathematics
- 2017–: Postdoctoral Fellow in Mathematics

## Other knowledge

- Interested and has been involved in politics
- Passionate about cooking
- Enjoys art and literature
- Likes going to the gym



Photo: Kristine Graneng

# Contents

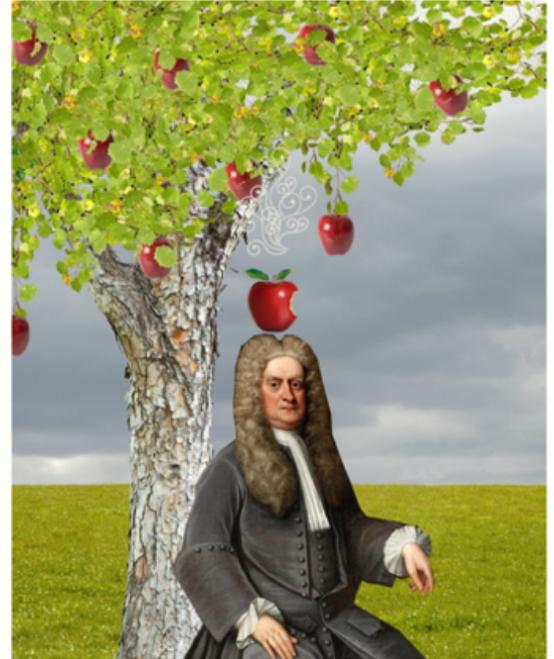
- Expectations
- My research project
- Collaboration with supervisor
- Integration in research environment
- Publishing
- Freedom vs. responsibility
- General advice



Source: tumblr.com

# Expectations

- Wanted to do real research.
- Work when I wanted and how I wanted.
- Use my curiosity to dig really deep into problems.
- Test my capacity.



Source: redbubble.net

# My research project



Source: mennesket.net

# My research project



Source: salon.com

# My research project



Source: wazala.com

# My research project

 Make Post |  Foto-/videoalbum |  Direktesendt video 

 **OMG**, I found the Holy Grail!!! 

— ved [Trondheim, Norway](#).

 Bilete/Video |  Kjensle/Aktivitet

 Sjekk inn |  Merk vener

 Etikett |  GIF

 Be om tilrådingar

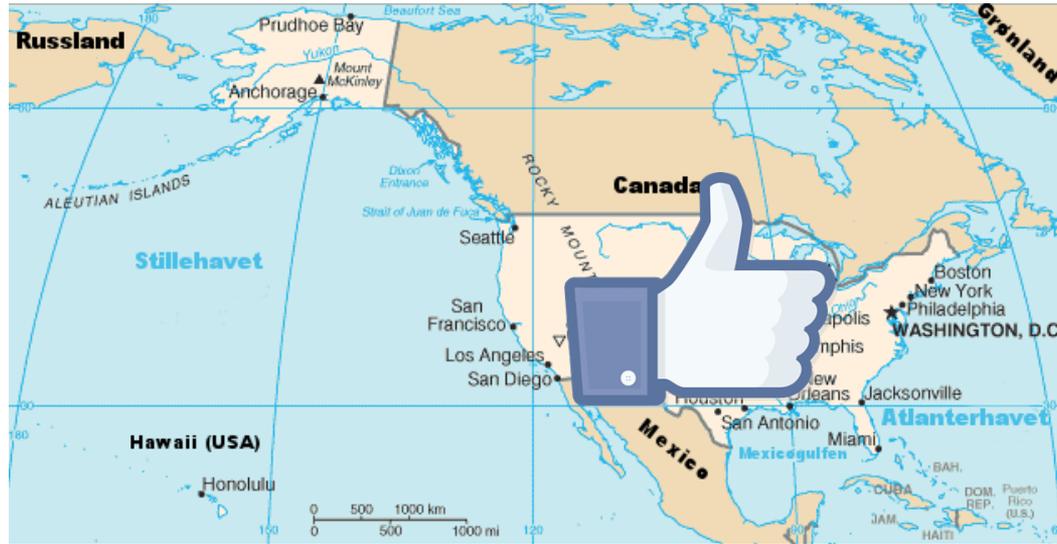
 Vener ▼ |  + Album ▼ | **Publiser**

# My research project



Source: Wikipedia

# My research project



Source: Wikipedia

# My research project



Source: Wikipedia

# My research project

$$\partial_t u + \operatorname{div} F(u) = \operatorname{div}(A(u)Du) + \mathcal{L}^\mu[\varphi(u)]$$

$$\partial_t u = \sup_{\xi \in \mathcal{E}} \{ b(\xi) \cdot Du + \operatorname{tr}(a(\xi)D^2u) + c(\xi)\mathcal{L}^\mu[u] \}$$

$$\partial_t u - \left( \operatorname{tr}(\sigma\sigma^T D^2\varphi(u)) + \mathcal{L}^\mu[\varphi(u)] \right) = 0$$

# Collaboration with supervisor



Source: painting by Gebhard Fugel

- Everyone is different.
- Find out works best for you and your supervisor.
- Tell someone if the collaboration is not working!
- In my case: co-worker, shared ideas, discussions



fa927133 FreeArt ©

Source: FreeArt

# Integration in research environment

- Networking is very important for a researcher!
- Our research is not interesting if no one knows about it.
- Do what you can to have an abroad stay.
- I went to France for a year: new culture, new faces.
- Try to engage actively in your community.
- In my experience, PhD candidates and postdocs have more time to spend on research.
- Make your research available through your own personal webpage.

# Publishing

- Continuously work on papers. Also when you have teaching.
- Read other relevant research: Improves your own writing!
- The way your achievements/results are measured.
- Writing takes time...
- It is not a perfect system.
- Think about:
  - Venues: conferences, journals, popular science.
  - How are research papers written in your field?
  - How to store relevant papers, notes, drafts?
  - How to arrange your references?



Source: 123rf.com

# Freedom vs. responsibility

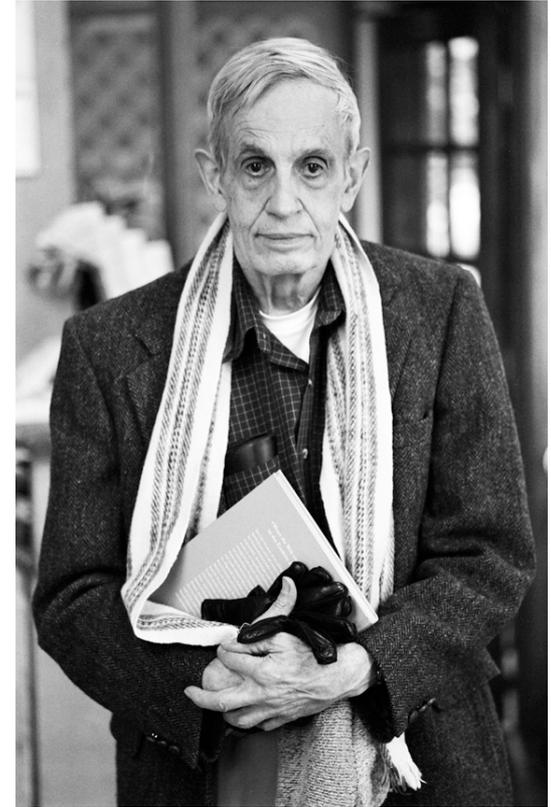
- Enjoy the freedom!
- But: With great power comes great responsibility.
- You have to make sure that you have the progress needed.
- Plan ahead!



Source: Heroes wiki

# General advice

- It is not always easy.
- Have fun!
- Work hard.
- Make and complete your goals.



Source: Wikipedia





Source: tumblr.com

Thank you!

Questions?