From PhD to Post Doc

About me



Formal knowledge

- 2008–2013: MSc in Mathematics
- 2013–2017: PhD at NTNU
- 2017–2020: Post Doc at NTNU
- 2020–: Post Doc at UAM, Spain

Other knowledge

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



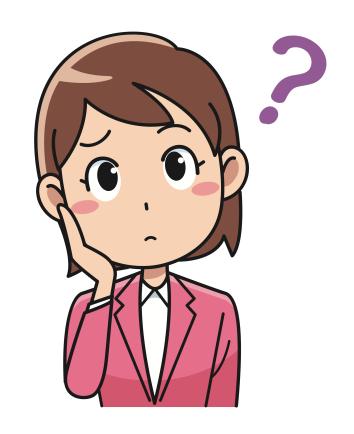
Photo: Kristine Graneng

Contents

- Things to think through
- My research
- Publishing
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- Questions/discussion

Things to think through

- Why am I doing a PhD?
- What do I want to achieve with it?
- How to use the PhD to reach my goals?



Source: pngegg.com

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

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

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



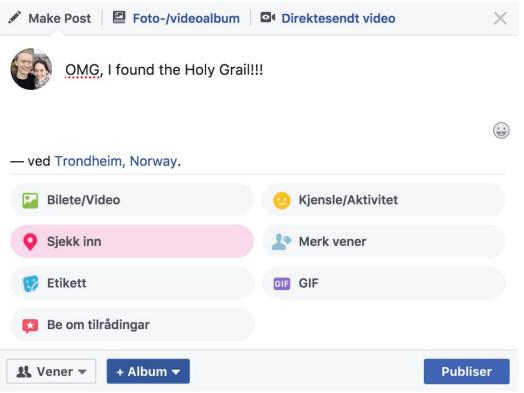
Source: mennesket.net



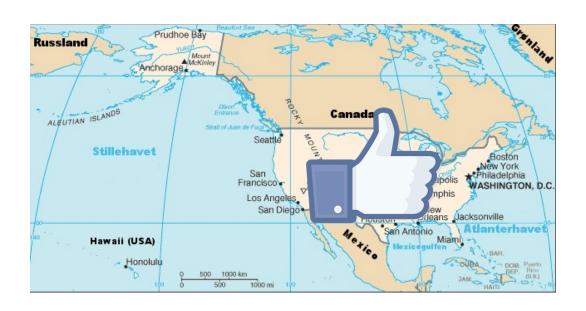
Source: salon.com

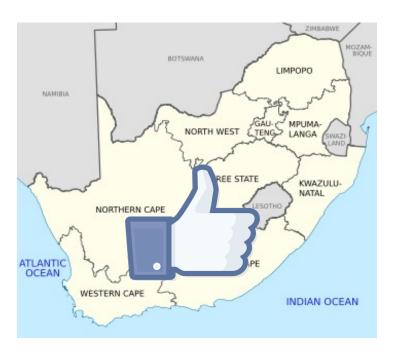


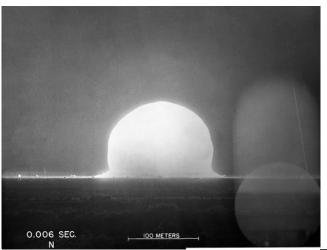
Source: wazala.com





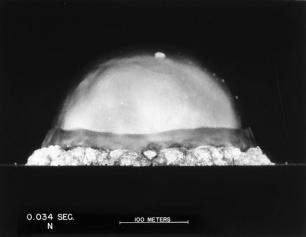








Source: Los Alamos National Laboratory



Publishing

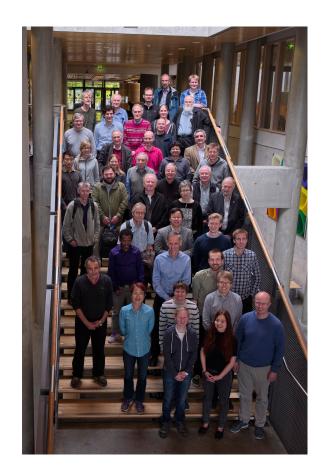
- Continuously work on papers. Also when you have teaching.
- Read other relevant research: Improves your own writing!
- The way your achievements/results are measured.
- Writing takes time...
- It is not a perfect system.
- Think about:
 - Venues: conferences, journals, popular science.
 - How are research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



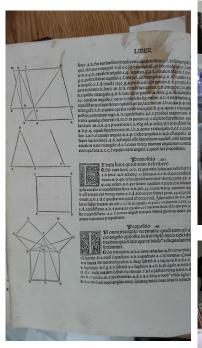
Source: 123rf.com

Networking

- Networking is very important for a researcher!
- Our research is not interesting if no one knows about it.
- But also to make contacts for grant writing and/or post docs.
- Do what you can to have an abroad stay.
- During PhD, I went to France for 1 year.
- During post doc, I went to Spain for 6 months.
- Try to engage actively in your community.
- In my experience, PhD candidates and Post Docs have more time to spend on research.
- Make your research available through your own personal webpage.



It is not all about the formal setting



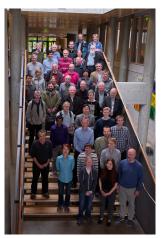












Grant writing

- The secret door to post docs.
- Not only personal grants, but also project grants.



Source: Wikipedia

- In Norway:
 - RCN: Three-year Researcher Project with International Mobility (2+1 years, personal fellowship)
- In EU:
 - ERC: Horizon 2020 → Horizon Europe
 - ERC: MSCA Individual (→ Postdoctoral) Fellowships (2(3) years, personal fellowship)
 - ERC: COFUND (national grants with ERC money, check each associated country)
 - EURAXESS (open Post Docs related to projects and COFUNDs)
- Other countries (note that UK will be part of Horizon Europe)?

Pandemics

- Harder to do networking, and thus, research itself.
- But try to keep in contact with those you know, and use them to get in touch with others.
- Easier in small groups?
- Use modern tools to discuss on virtual blackboards.



Source: pngegg.com

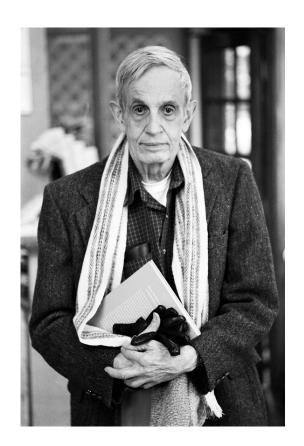
General advice

• It is not always easy.

• Have fun!

• Work hard.

• Make and complete your goals.





Source: tumblr.com

Thank you! Questions?

Some links:

- About MSCA:
 https://ekstern.filer.uib.no/fa/Websider/MSCA/MSCA_PF_Fact%20sheet%20for%20rese
 archers_UiB.pdf
- EURAXESS jobs: https://euraxess.ec.europa.eu/jobs/search/field is eu founded/h2020-marie-sk%C5%82odowska-curie-actions-867

Some people:

- At IE faculty: Filip Jessen and Ida Kallmyr Lerheim
- At RCN: https://www.forskningsradet.no/en/EUs-framework-programme/horizon-europe/ncp/