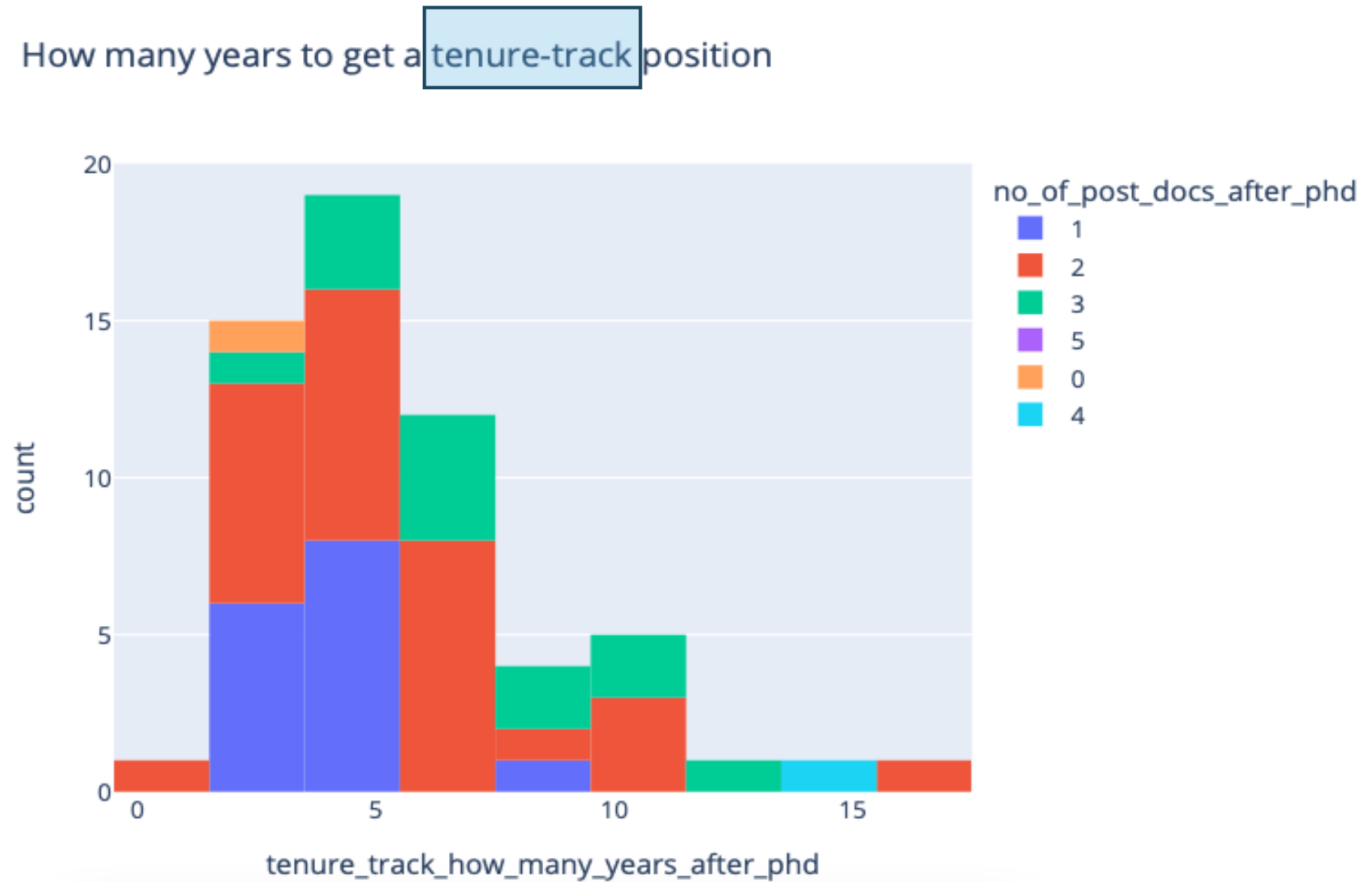


Applying to competitive funding

Lesya Shchutska

EPFL

It's never too early to move to the next step



What is missing:

- how many years/postdocs to decide to quit academia....

It is more likely to be too late

- In some places more explicit than in the others:
 - <https://ethz.ch/en/the-eth-zurich/working-teaching-and-research/faculty/faculty-affairs/arten-von-professuren/assistentzprofessuren.html>
 - <https://rechtssammlung.sp.ethz.ch/Dokumente/510.21en.pdf>

5. PARAGRAPH: AGE LIMITS

Article 13

¹ Basically, ETH Zurich's goal is to appoint young assistant professors with great potential. As a general rule, assistant professors should not to be older than 35 at the time of their appointment.

² This age limit maybe increased due to special reasons which led to a career slowdown. Namely:

- a) relevant industrial experience;
- b) career slowdown due to parenthood;
- c) prolonged military service.

It takes time to learn how to do things

- Typical grant application requirements:
 - 1-4 years after PhD for Ambizione
 - 2-7 years after PhD for the ERC StG
- Typical review duration / resubmission possibilities:
 - about 1 year
- Easily getting to 3-5 years after PhD for a start of a successful grant
- + 4-5 years grant duration \Rightarrow 8-10 years after PhD w/o permanent (or even tenure-track) position

Personal experience (PhD in Aug 2012)

- Dec 2014 – first application for a professor position (was invited to), then more
 1. May 2014 – first application for LPC Distinguished Researcher fellowship at FNAL
 - “New physics searches with leptons at 13 TeV LHC”
 2. May 2015 – second application for LPC Distinguished Researcher fellowship
 - Successful!
 3. Sep 2015 – first application to Ernest Rutherford Fellowship (UK)
 - “New physics searches with LHC and SHiP experiments”
 4. May 2016 – application to SNSF professorship
 - “New physics searches with leptons at the energy and intensity frontier with the LHC”
 5. Sep 2016 – second application to Ernest Rutherford Fellowship (UK)
 - “Probing the hidden sector with CMS”
 6. Oct 2016 – application to ERC Starting Grant
 - “Majorana neutrino discovery strategy with CMS” – successful!

Personal experience (PhD in Aug 2012)

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- 6. Oct 2016 – application to ERC Starting Grant
 - “Majorana neutrino discovery strategy with CMS” – successful!
- 2014 – SHiP convenership for physics case paper
- Dec 2014 – appointment as a sub-WG convener in CMS (Leptonic SUSY)
- Sep 2016 – second sub-WG convenership (MC & Trigger in SUSY)
- Sep 2017 – WG convenership in CMS (SUSY), appointment known in spring
 - in time for the ERC StG interview!

SNSF feedback (Aug 2016)

Le Conseil a souligné la qualité de votre parcours académique, particulièrement dans le domaine de la physique à haute énergie. Bien que votre liste de publications soit bonne et mette en évidence vos travaux indépendants et les études résultant de collaborations, il a jugé que votre portfolio scientifique n'est pas encore suffisant pour être compétitive à un poste de professeur dans le domaine très concurrentiel de la physique expérimentale des particules. Votre projet est original mais le Conseil n'est pas convaincu que vous disposiez, pour l'instant, de l'expérience nécessaire pour le mener à bien. D'une manière générale, le Conseil a estimé que votre candidature à un subside « Professeur boursier » était prématurée à ce stade de votre carrière. Pour ces raisons et en comparaison des autres dossiers soumis, le Conseil a décidé de ne pas retenir votre candidature pour la deuxième étape de l'évaluation.

Effectively: “Too young and inexperienced to become a professor”

Lessons for the ERC application (Oct 2016)

- Attended a dedicated ERC grant writing training
- Completely rewrote the **CV – entrance point for every evaluator!**:
 - described leadership positions in a way understandable to other fields
 - highlighted student supervision/conference organization
 - described research experience in a concise way to highlight its broadness
- Made **project introduction accessible to non-specialists**:
 - first page (out of 5) had all the key points: motivation, goals and means
 - part B1 (evaluated in 1st step) much more important than part B2
- Got a feedback from the CMS Grant committee people (there is a twiki!)
- Got a feedback on the CV and on the project from **non-HEP-ex colleagues**
- **Rehearsed interview where possible**:
 - ETH Zürich group meeting
 - CMS Grant committee
 - CH ERC office (this one was for a fee, paid by the lab – thanks!)

ERC outcome and next steps

- Aug 2017 – positive decision
- Dec 2017 – appointment as an assistant professor at ETH Zürich
 - 5+ years after PhD, 32 y.o. (within ETH Zürich rules)
- Dec 2017 – application to a tenure-track professor opening at EPFL
- Feb 2018 – interview at EPFL (advanced due to upcoming maternity leave)
- Jun 2018 – offer from EPFL (ranked 2nd, #1 had declined a position)
- Dec 2018 – appointment as a tenure-track assistant professor at EPFL
 - 6+ years after PhD, 33 y.o. (within EPFL rules)
- Apr 2019 – start at EPFL as a tenure-track professor

Further experience and observations

- ERC StG provides only a non-tenure professor position in CH:
 - in other countries might have more options
 - funding is not adapted to the level of CH salaries: if need to pay your own, not much budget left for the team ⇒ might be hard to write a convincing proposal
- SNSF equivalent funding scheme is more adapted to CH salaries, but limited only to CH
- Ambizione is a great advantage of Switzerland:
 - but cannot pause for 3-4 years and need to progress in career
 - 2 Ambizione fellows in my group got permanent positions in France and Italy within their first year of the fellowship
 - the 3rd one has just started

Key messages

- Start early
- Develop broad overview of the field
 - helps to get original ideas!
- Make sure to convey your achievements (CV) and project to non-specialists
- Solicit feedback from more experienced colleagues, also from neighboring fields
- Do not stop after the first success!
 - and especially after the first failure ;)