

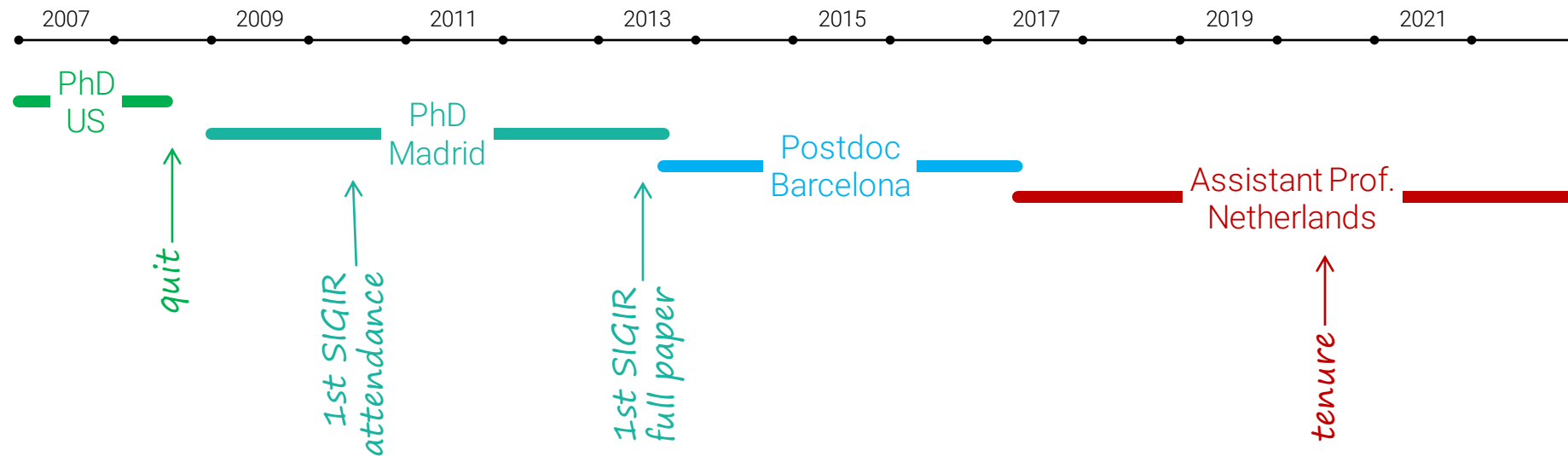
Your PhD & You



Picture by Robin Higgins

Me

- Julián Urbano
- Assistant Professor @ TU Delft, Netherlands
- Information Retrieval (Evaluation)



There's a longer version of this talk

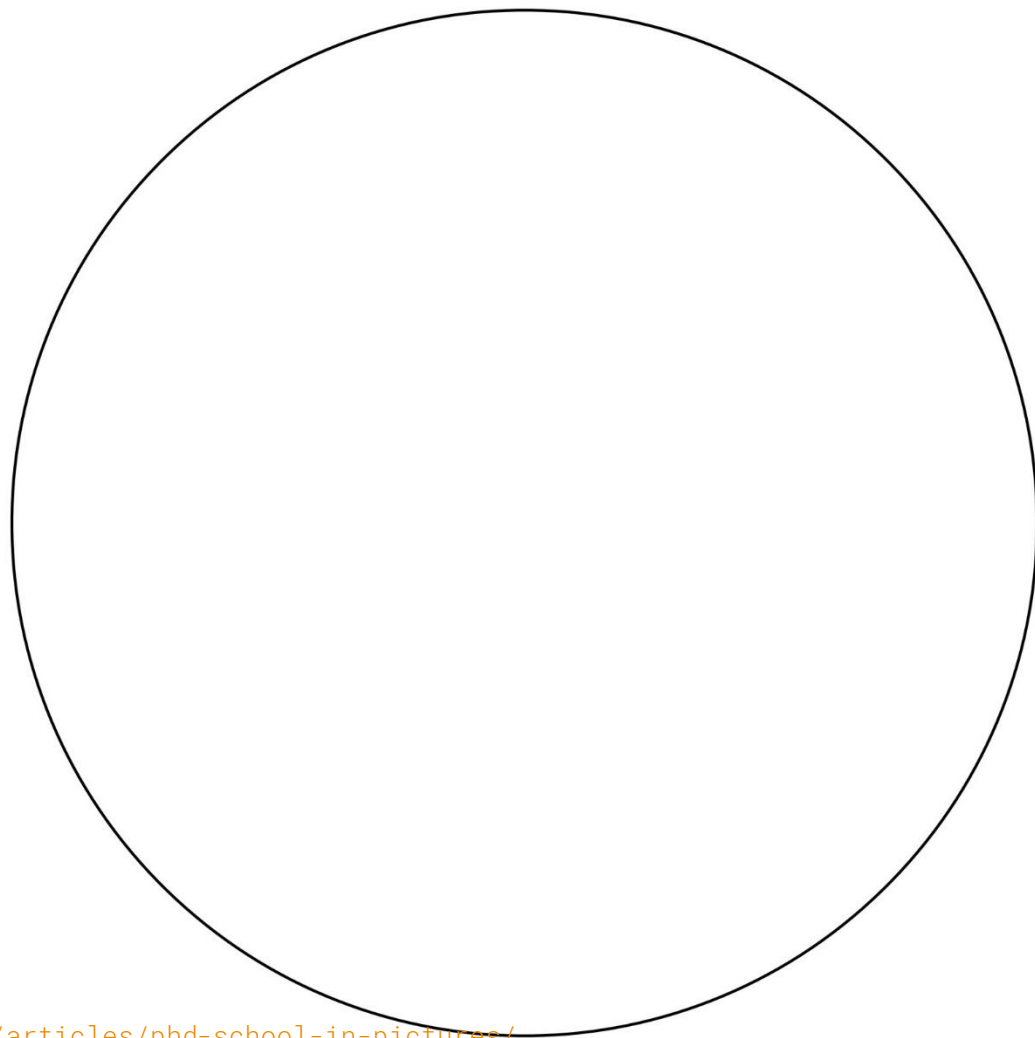
Outline

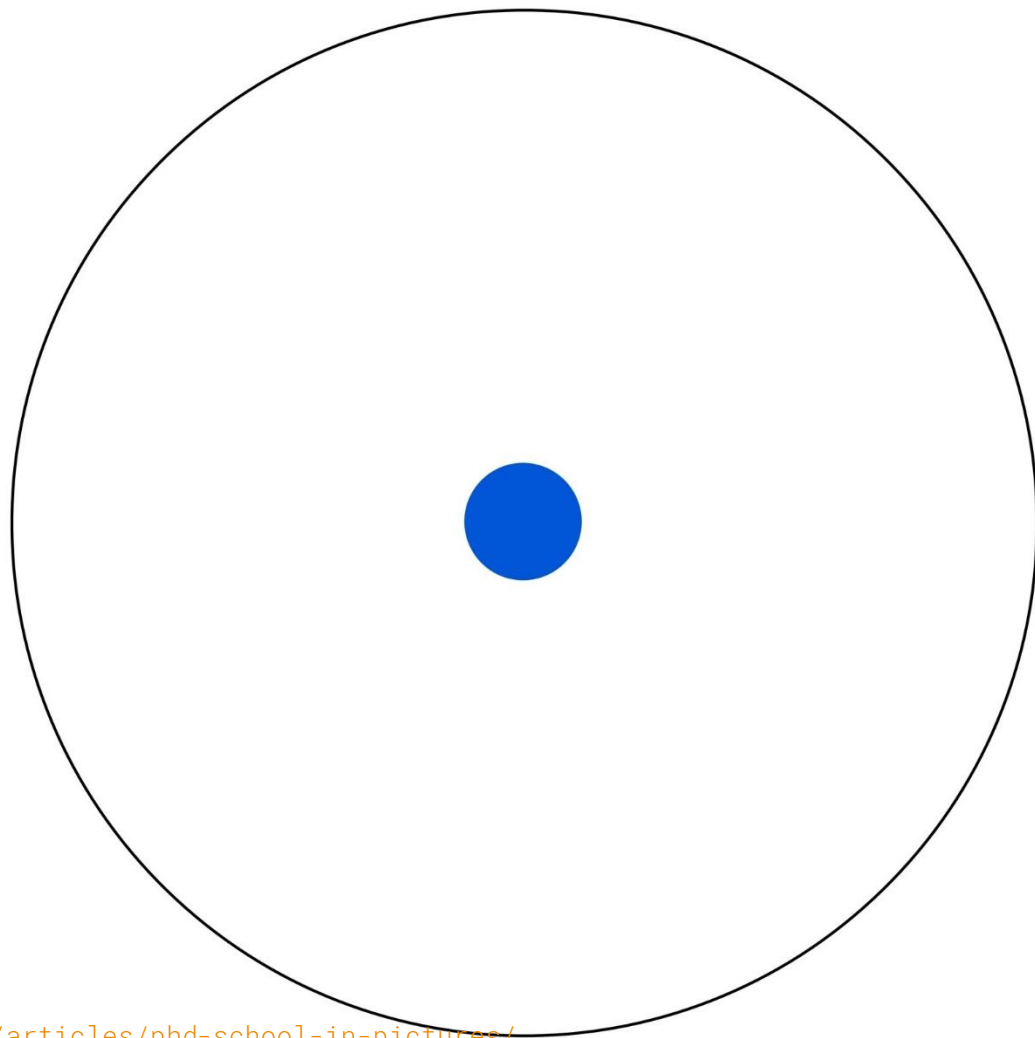
- Tools
- The fundamentals
- Your message
- The others
- You
- Life

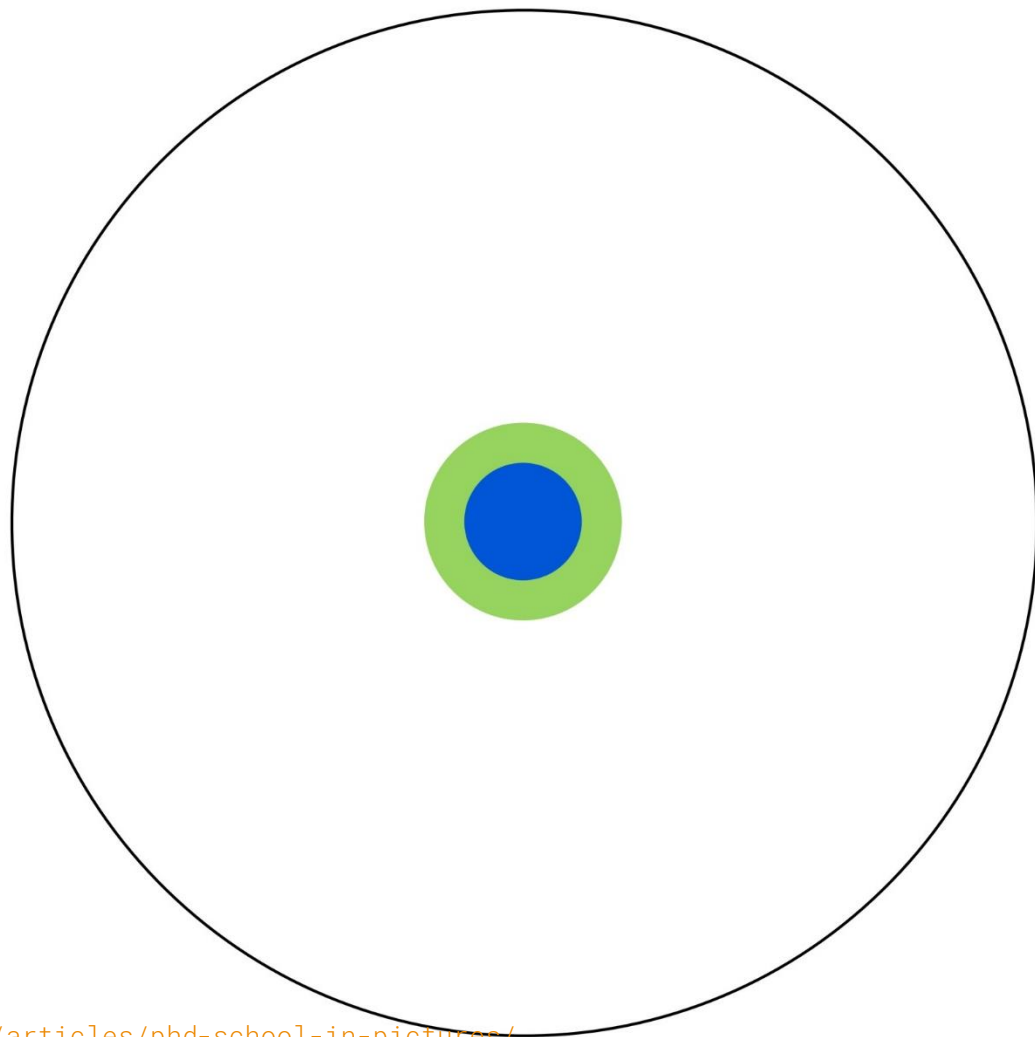


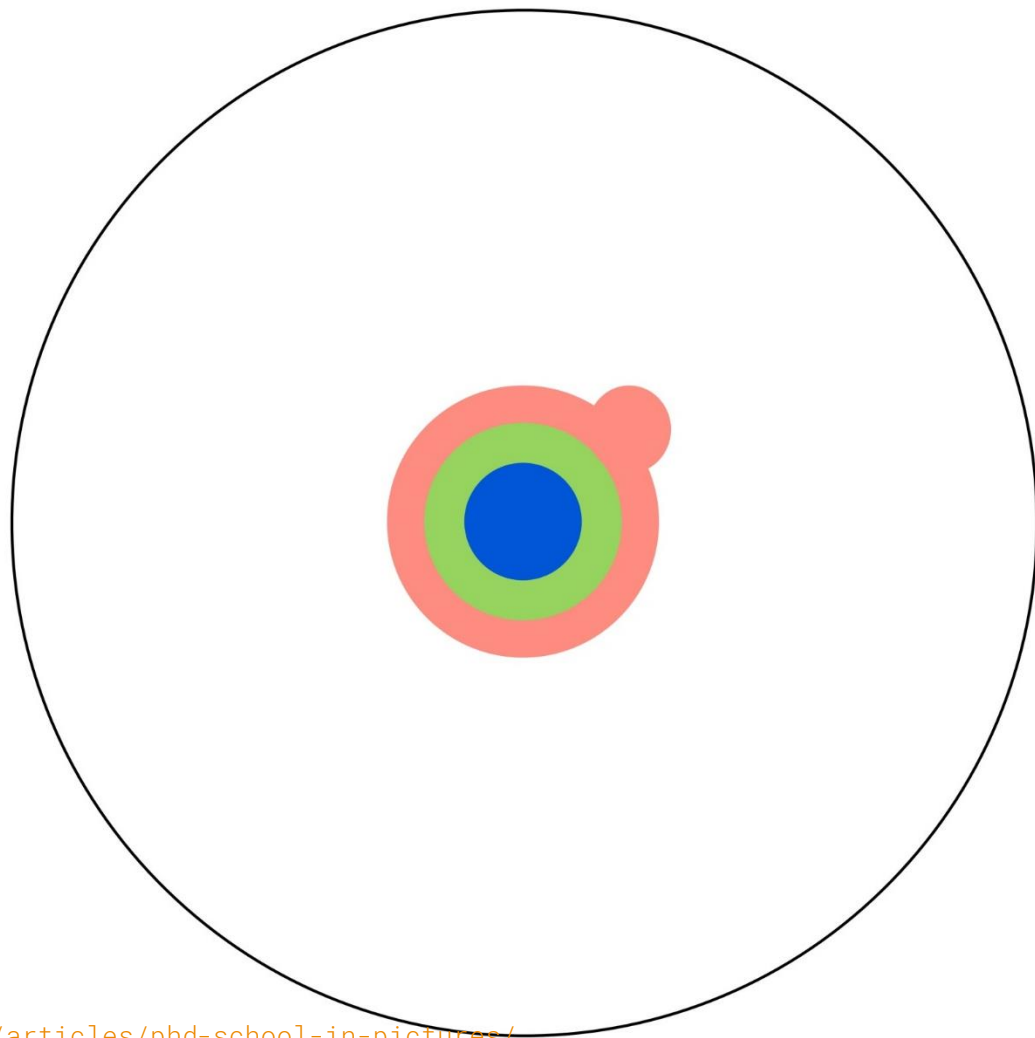
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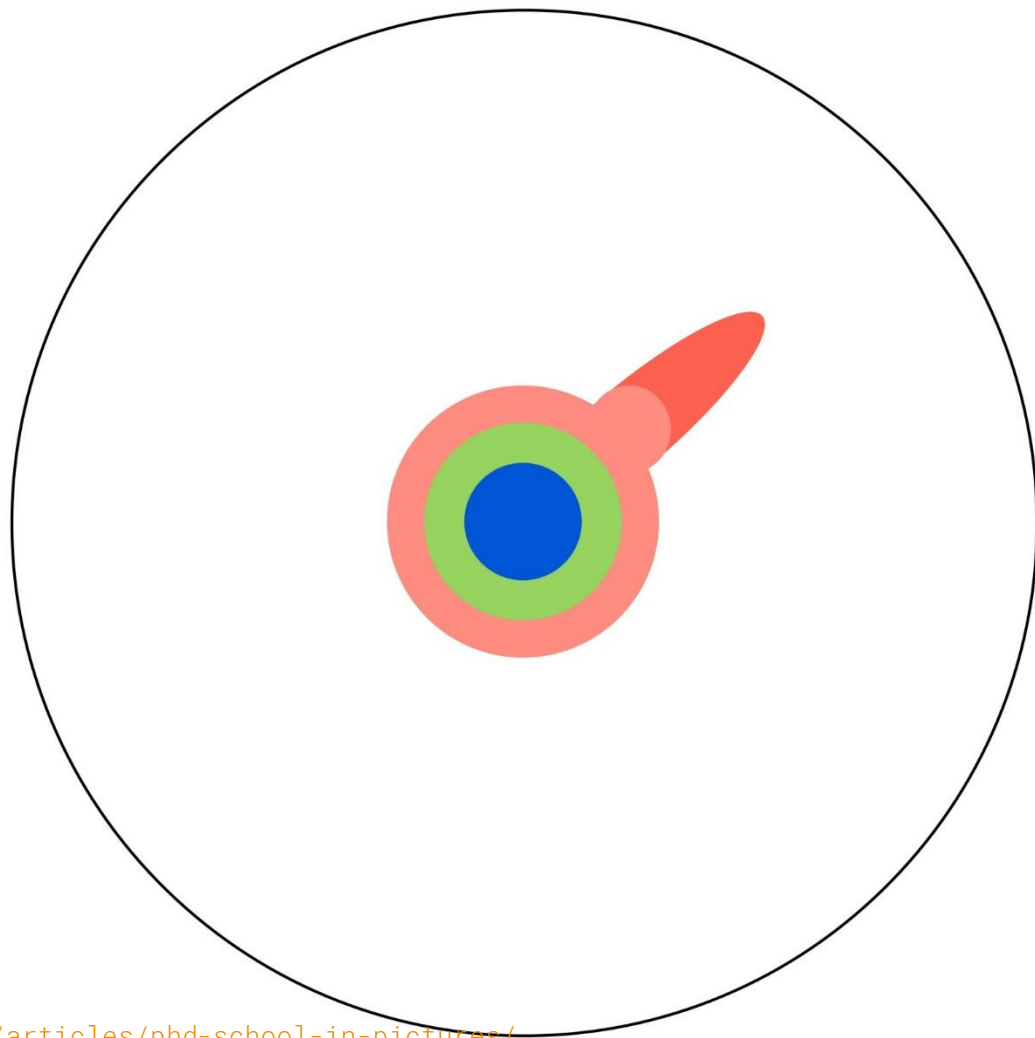
THE OTHERS

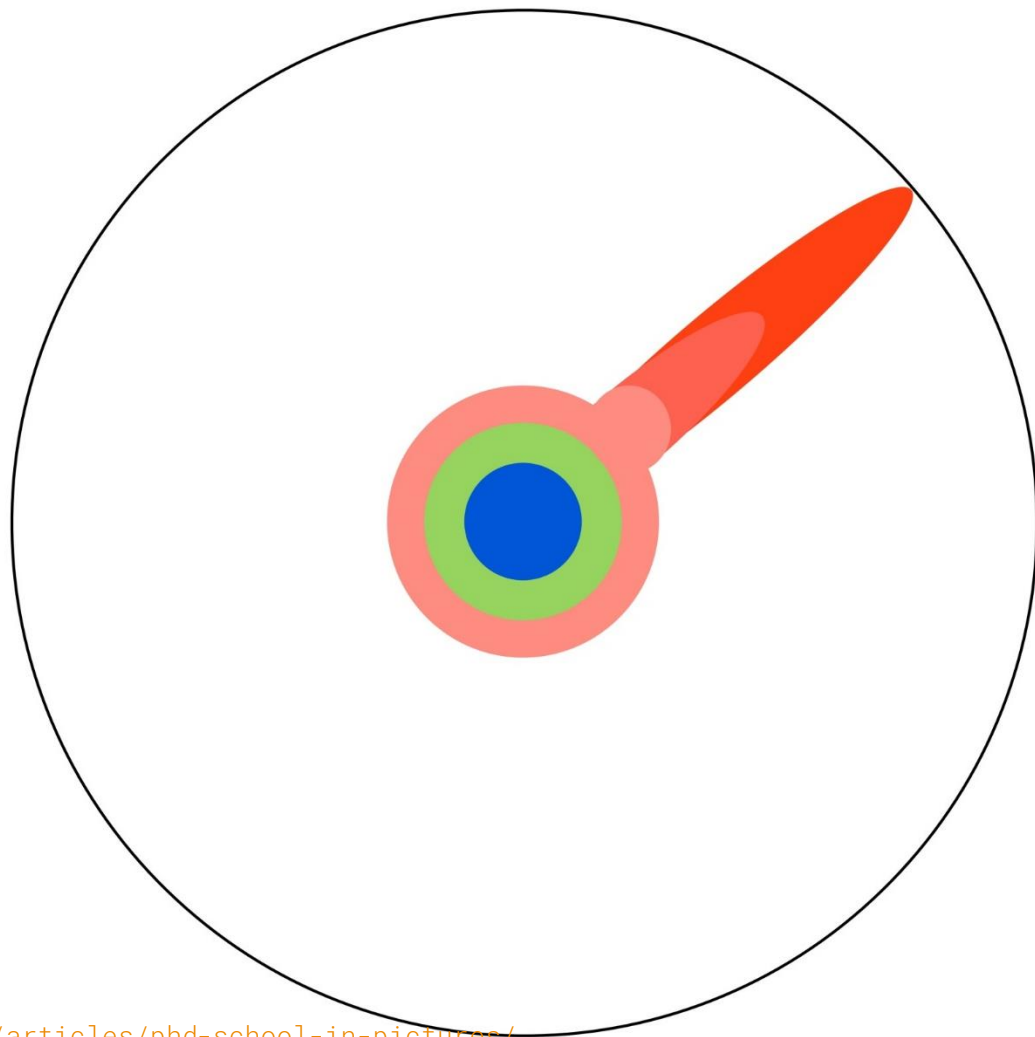


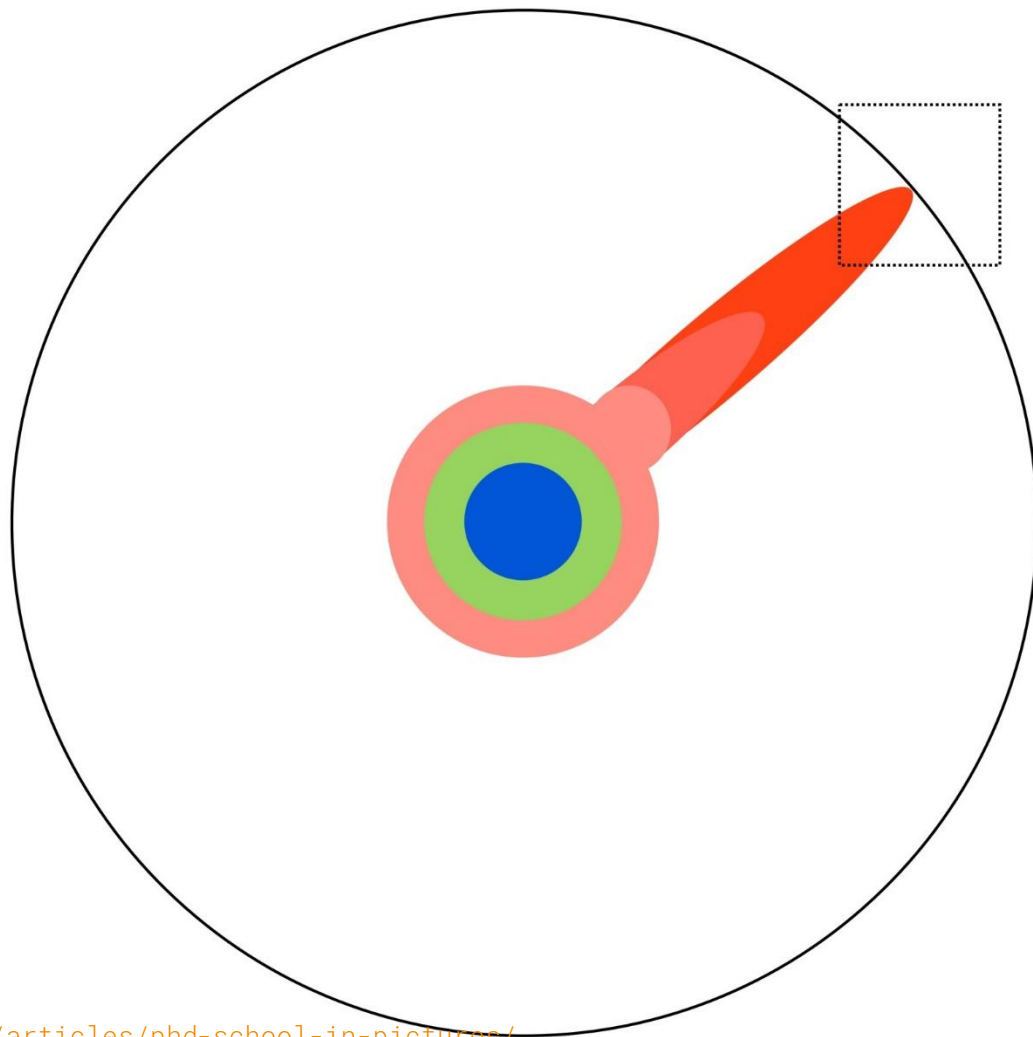


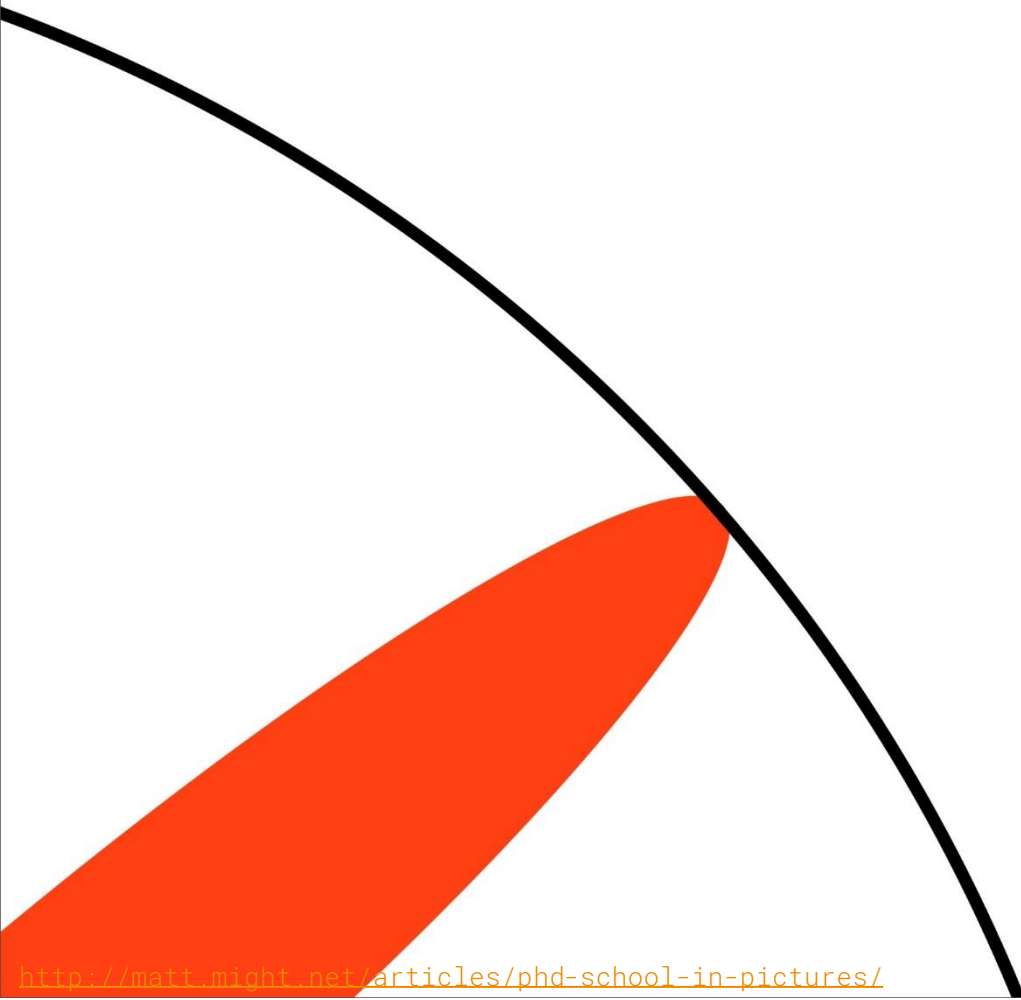


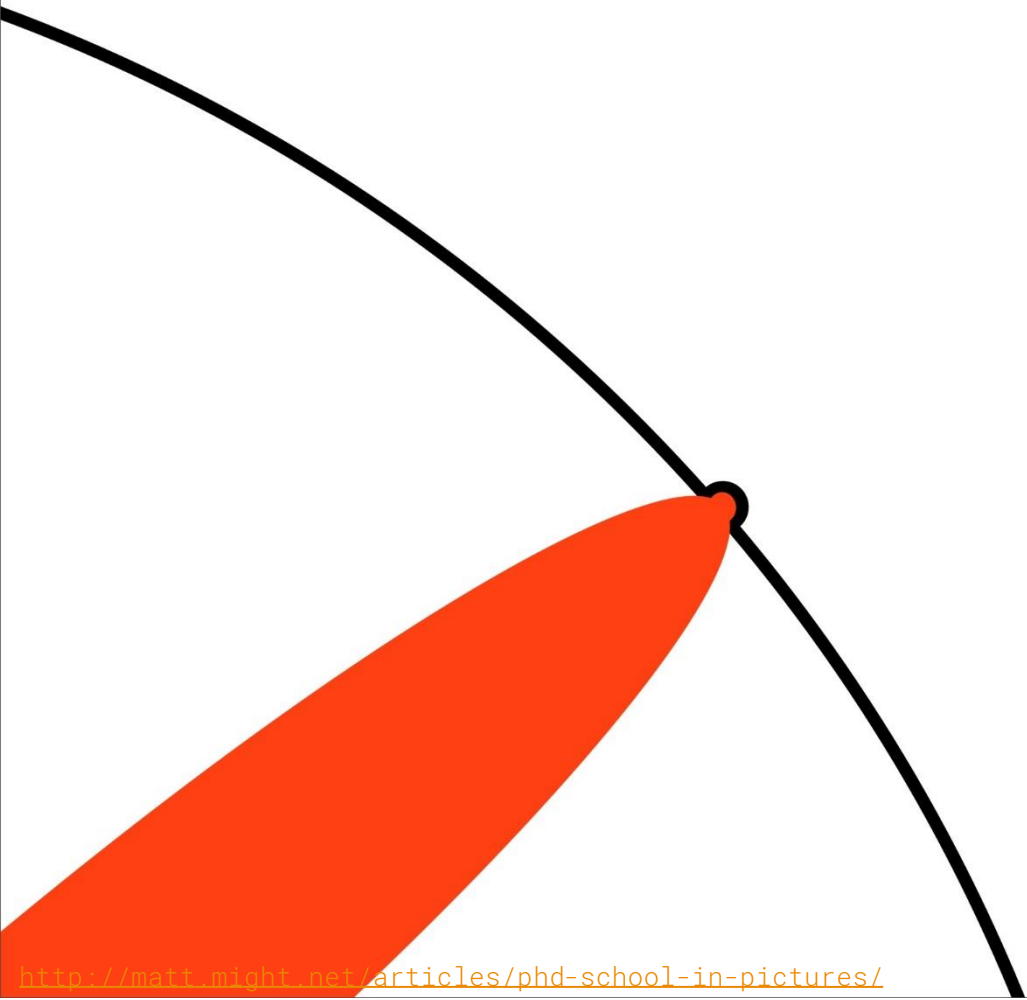


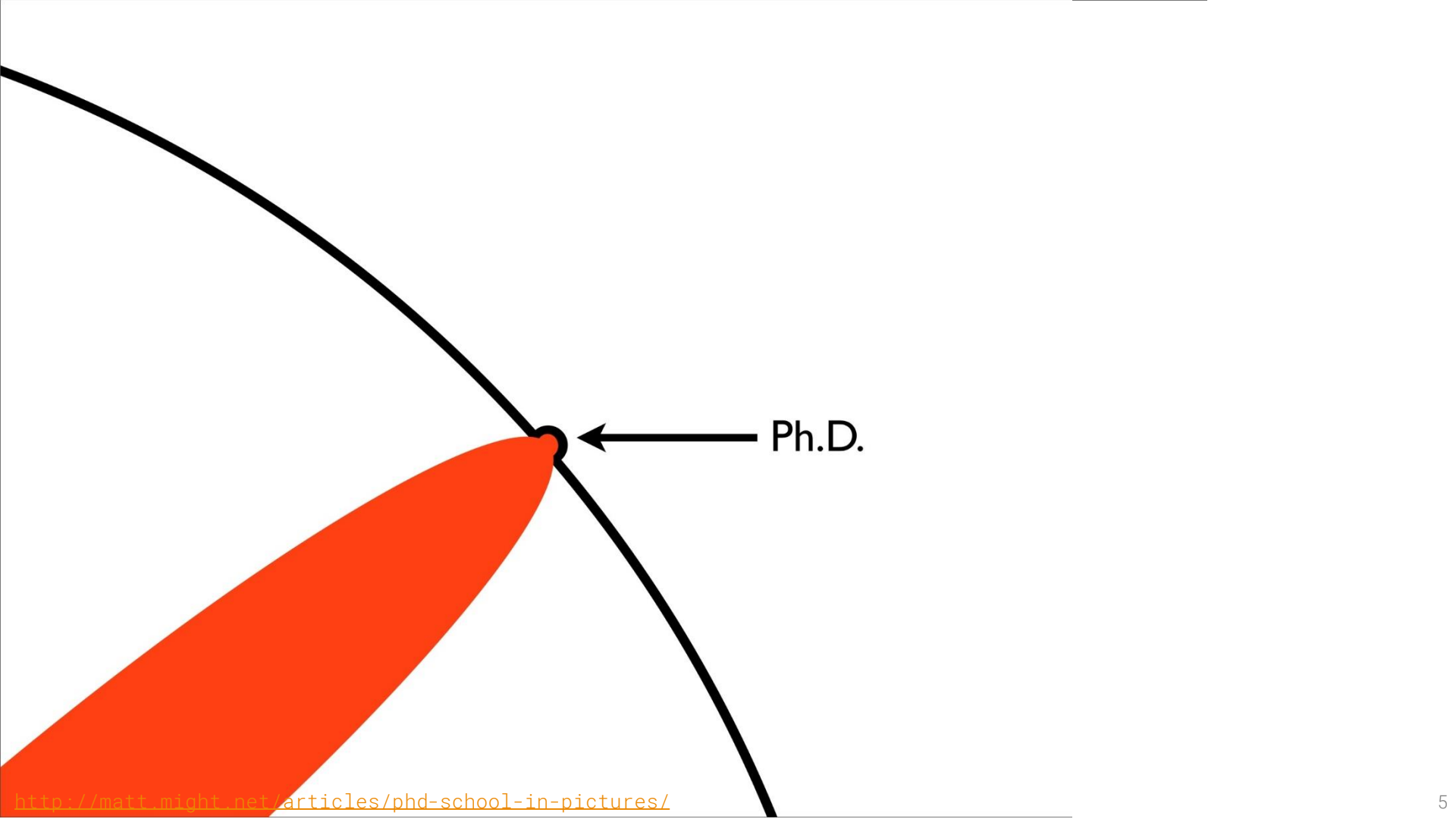




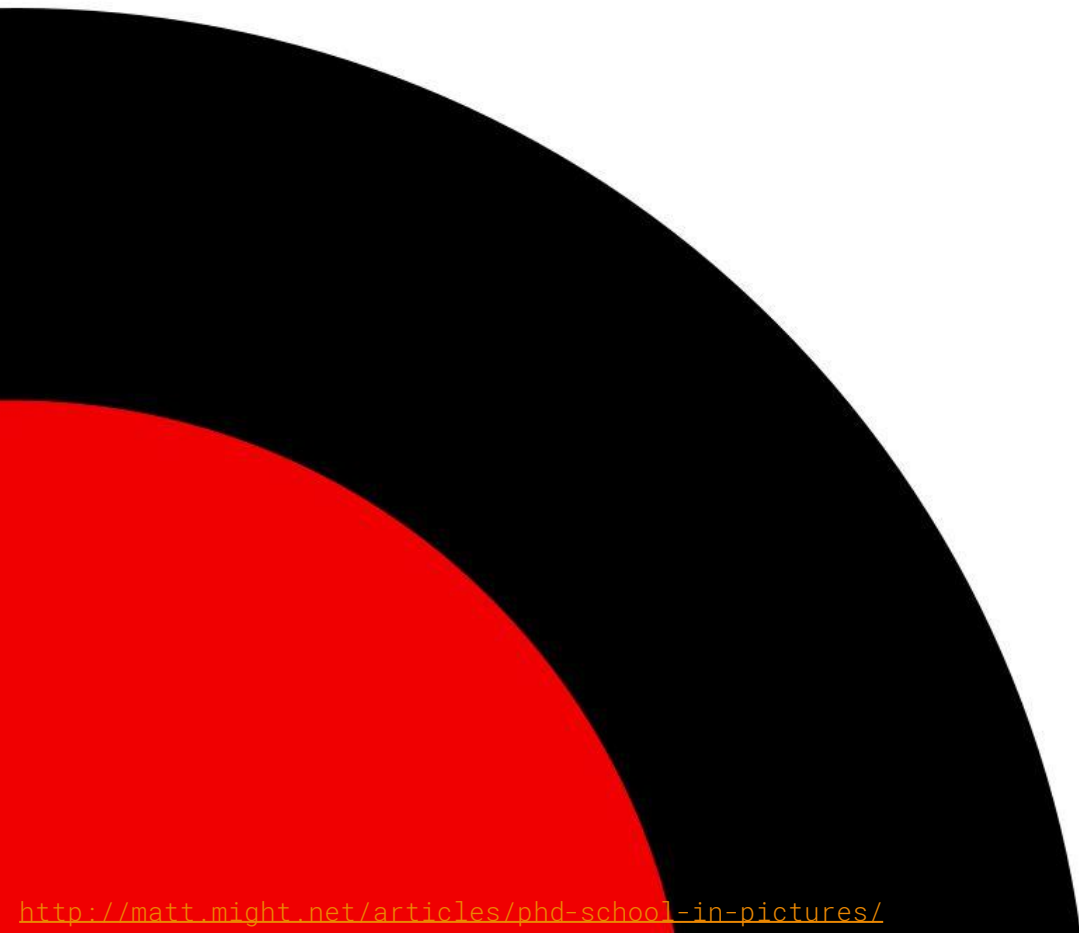


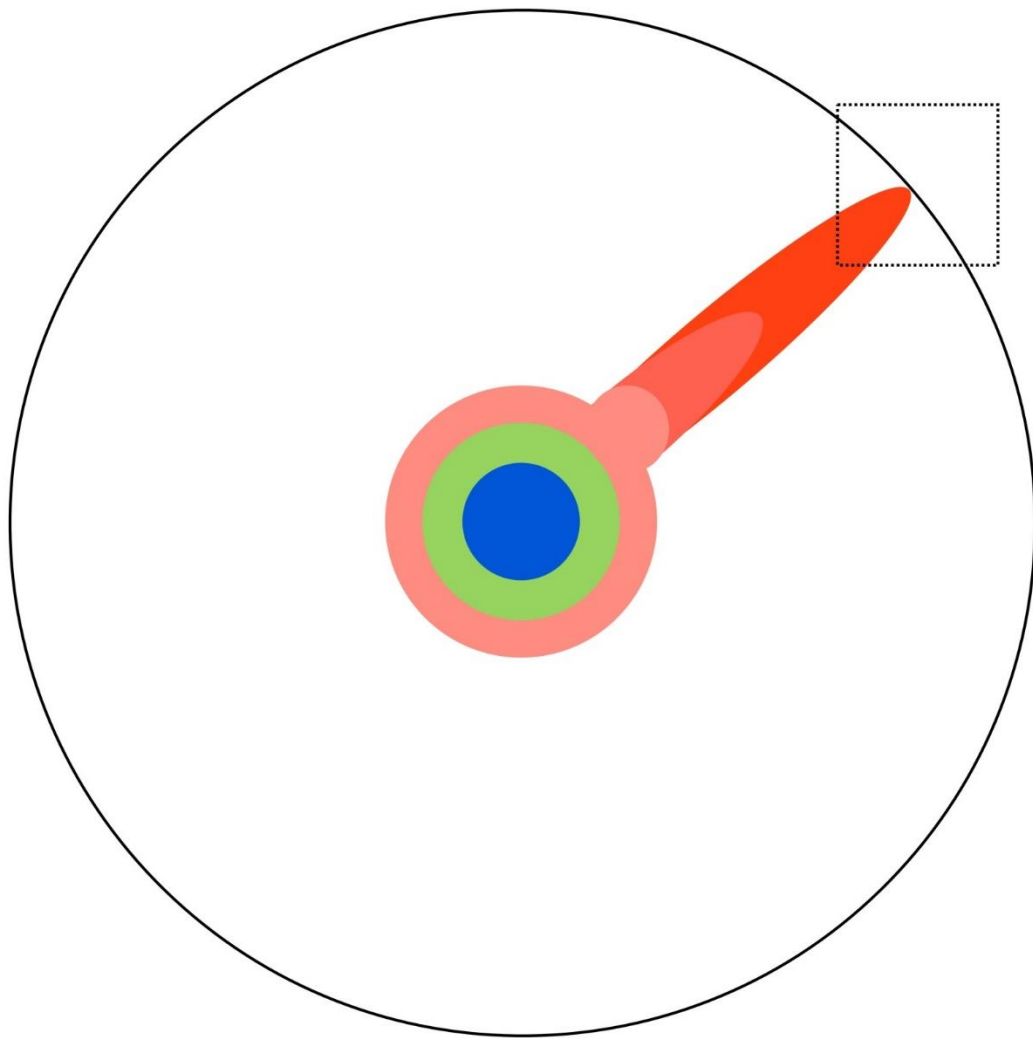






Ph.D.





The community

- Research doesn't happen in a vacuum
- Know the community, the people. **Make friends**
- Show interest in the work of others. Acknowledge them
- **Surround yourself by people who complement you**
- Work with others and learn from them
- Explore other communities and other fields
 - Realize that STEM > nothing

Your advisor

- It's **your** PhD; you're on your own
- Advisors are just feedback machines; the more you put in, the more you get
- **Be proactive, always ask for feedback**
 - Take silence as positive feedback (I know...we're sorry)
 - Ask for hypercritical feedback
- **Careful with never-ending feedback: *"it's never good enough!"***
 - If your work is good enough but you still get feedback, that's normal
 - We're not there to give you a grade, but to help you **move forward**
 - How much farther is something you two need to talk about, so be open about it
 - What matters is what kind of questions you ask, and what you do with the feedback

Family and friends

- *“Life is that thing that happens while doing your PhD”*
- **Don't take family and friends for granted**
- They'll still be there for you, but it won't be the same
- You'll miss many things, and you'll regret it
- Yes, you can put the laptop away and go see other people
- **Don't be afraid to talk about your work.** Teach whenever you can!
- **Exercise.** You'll feel accomplished regardless of how your work goes

You

What's going on?

- You've always been... top of the class, positive attitude, enjoyed what you did
- But suddenly... think you're not good enough, become negative and suffer from what you do?
- So let's talk about...
 - Stupidity
 - Dunning-Kruger effect
 - Impostor syndrome
 - The valley of shit
 - The pit of despair

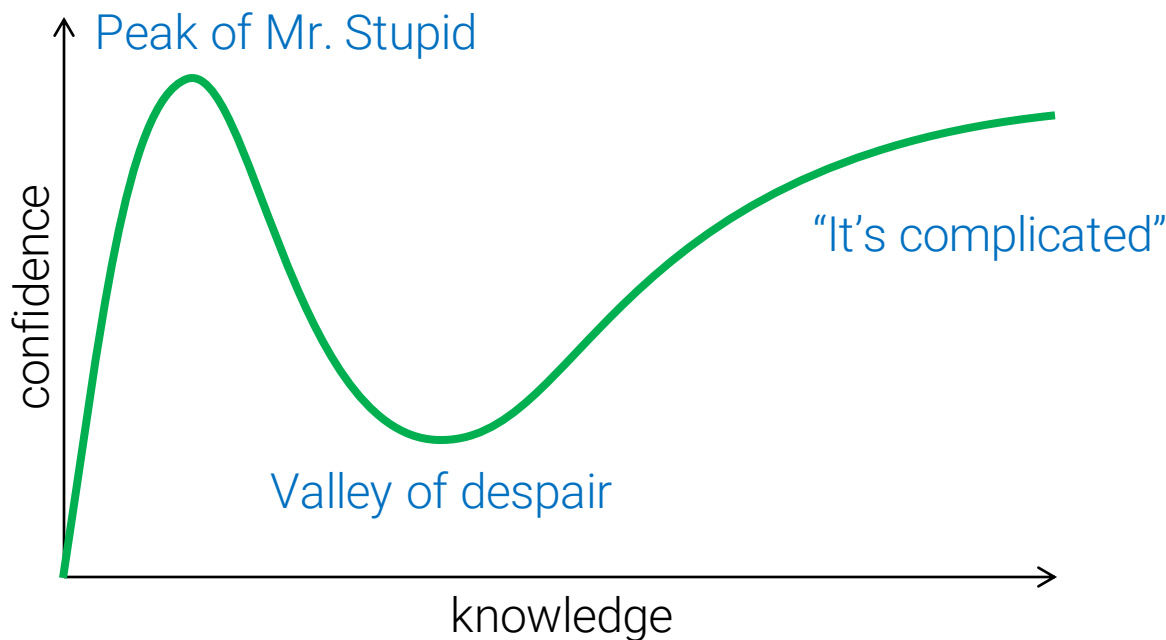
You're not qualified
to judge the value
of your own work

Stupidity

- So far you've been evaluated based on your answers to questions, but in research nobody knows the answers
- **So why should you?**
- The amount of things you don't know is, for all purposes, infinite
- **This shouldn't discourage you. It's liberating!**
- If you don't feel stupid, you're doing it wrong
- You won't always succeed, be comfortable with the mistakes and take them as opportunities to learn

Dunning-Kruger Effect

- The incompetent believe they know it all. The wise doubt they know anything.



Dunning-Kruger Effect

- Keep learning and practicing
 - The more you know about something,
the more you'll recognize how much there is still to learn
- Ask others how you're doing
- Question what you know and what you do

Impostor Syndrome

- Do you doubt of your accomplishments and fear to be exposed as a fraud?
- *After an accepted SIGIR paper: "I was just lucky, I didn't deserve it"*
 - Result: you always put extra effort because otherwise you'll fail
- *After they tell you you're good: "They don't know what they're talking about"*
 - Result: you ignore absolutely all forms of positive feedback

Maybe you're just normal;-)

The Valley of Shit

- It suddenly feels like you can't manage
 - You lose perspective, confidence, and start second-guessing: will I be able?
 - Everyone thinks you're fine and will make it, but how do they *really* know?
- If can feel endless, but it does have and end: the brown stuff blocks your view
- **You're alone in it, but there's no need to be lonely.** Talk about it
- May happen once or multiple times, for long or short periods, but it'll happen
- **Keep walking. It's just a valley**

The Pit of Despair

- *Nothing* seems to go right, it's all slow, difficult: what am I doing here?
- The smell turns into constant depression and anxiety for no reason, don't care about anything and are incapable of enjoying your work
- Then you're not walking the valley anymore. You're digging a pit.
- Take time off, get help and get well. Be kind to yourself, allow you to stand up
- You'll start caring again, even if just to hate everything, but that's the first
- It's ok to quit, but don't do it because *you* think you're not capable

let's be honest....

It happens to all of us
...and well beyond
our PhD

Procrastination

- Try to learn why you do it
 - Fear of failure, fear of success
 - Fear of attachment, fear of separation
- Make it work for your own advantage
 - Accept that you'll do it last minute anyway, so do those tedious things in between
- **It's all about *when* you feel the pressure**
 - Work in 45m time slots
 - Schedule time for yourself
 - Use a time tracker, **the pressure of yourself**
 - Set deadlines with your collaborators; **the pressure of others**

I think, therefore I'm biased

- Cognitive biases are shortcuts that help us overcome certain problems
 - Too much information, not enough meaning, need to act fast, what to remember
- They will mostly fail us and make us be wrong
- They are everywhere. Once you know about them, you'll see them all around



We store memories differently based on how they were experienced



Biases in Academia

- **Confirmation bias:** only see the 20% of results that agree with our expectations
- **Survivorship bias:** only see other people's successes, not their failures
- **Anchoring bias:** tend to overrate the first papers we read
- **Authority bias:** tend to attribute more value to statements by popular authors
- **Hindsight bias:** everything is obvious once we know the answer
- **Self-service bias:** success is thanks to us, failure is because of others
- **Self-handicapping bias:** not giving ourselves enough time is a win-win situation.
Success: *"and I only spent 1 day!"* Failure: *"well, I only spent 1 day...."*
- **Backfire effect:** all reviewers are wrong, and we hate them

You're biased too, and that's great

- We may easily fall for the blind spot bias
 - Tendency to see ourselves as less biased than others
- Don't kid yourself. We are all biased. Accept it
- Acknowledge that there's room for improvement
- **Confirmation bias will actually help us identify our own biases, everywhere**
- Will ultimately help us understand ourselves better, how we think, and how to become better at it

TAKE HOME MESSAGE

- A PhD is a wonderful, life-transforming thing
- There will be ups and downs. It happens to everyone. Talk about it
- Remember why you're doing it. Enjoy it, and grow as a human being

It's all about
You