

## Life of a PhD student

Renato Bellotti Summer student programme, 07.08.2024

#### About me





## Renato Bellotti (\*28.11.1994)

- 2013 2018: BSc ETH in Physics
- 2018 2020: MSc ETH in Computational Science and Engineering
- 2020 2024 (hopefully): PhD in Medical Physics

PhD: philosophiae doctor, doctor of philosophy

#### **Outline**

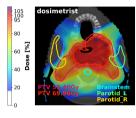


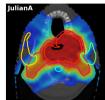
- 1. Why I wanted to do a PhD
- 2. How I got my PhD
- 3. Start Phase
- 4. Main Phase
- 5. End Phase
- 6. Questions

## My PhD: Automating Planning for Proton Therapy









## Why did I want to do a PhD?





#### How to become a PhD student?



1. Find a supervisor



2. Apply for the position



3. Shine!



## Choosing a PhD project can be overwhelming!



- Lab vs. desk?
- Applied vs. fundamental research?
- Team player vs lone wolf?
- Tight guidance vs. loose supervision?
- Interdisciplinary vs. domain-specific?

## Choosing a PhD project can be overwhelming!



- Lab vs. desk?
- Applied vs. fundamental research?
- Team player vs lone wolf?
- Tight guidance vs. loose supervision?
- Interdisciplinary vs. domain-specific?

# Advice Listen to your heart! A PhD project is a commitment!

## Choosing a PhD project can be overwhelming!



- Lab vs. desk?
- Applied vs. fundamental research?
- Team player vs lone wolf?
- Tight guidance vs. loose supervision?
- Interdisciplinary vs. domain-specific?

# Advice Listen to your heart! A PhD project is a commitment!

## Advice Never compare PhD projects!

#### **The Start**



- 1. What is the problem?
- 2. How is it currently solved?
- 3. How can I contribute?

#### **The Start**





New friends!



Teaching!



New knowledge!



**Mentor students!** 

### **Everything everywhere all at once...**



#### **Project Management**



TODOs, deadlines, attending talks, teaching, exams, conferences, ...

#### **Knowledge Management**



Obsidian, Notion, idea tracking, resource tracking, literature, ...

#### Writing a research plan guides you!

### **Main Phase**



Do science



**Present results** 



**Publish** 



## **Ups & Downs**





### **End Phase**









## **Questions?**

Let's connect on LinkedIn or write me an email! renato.bellotti@psi.ch