# **Status of BSc Thesis**

Developing Expert Tools for the LHC



18th August 2017

## Plan (in short)

- General:
  - Device Backup
  - Environment Variables
- Routines (concrete):
  - Null RF Feedback and RF Modulator
  - Align phases
  - Fine Alignment



## **Done and Ongoing**

- General:
  - Device backup [DONE]
- Routines:
  - Null RF Feedback and RF Modulator [ALMOST DONE] Code needs to be improved (modularized and organized).
  - Fine Alignment [DONE] Add system stability check.

~5200 lines of code now



#### To Do

- General:
  - Environment Variable

Link all routines (current ones as well as future ones).

- Routines:
  - Phase alignment

Explore and Implement all steps for phase alignment.

#### Final step: unite everything

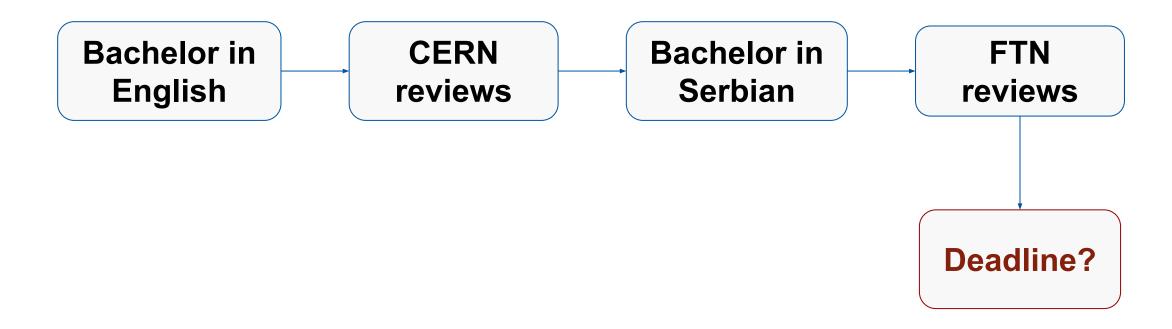


## Testing

- Code Functionality Testing:
  - PyTests/Unittests
  - Comparison to Matlab output (where possible)
  - Testing on simulation cavity 5B0
  - Maybe: testing on the operational system (Fine alignment)



#### **Bachelor work flow**



\* BSc EN WIP: https://docs.google.com/document/d/1--0nqFilalXrTfc84WTVoMhQRxaFgoD93DIvqMWxofY/edit#

