

# **Master's thesis discussion**

## **Meeting Minutes**

27/01/2021

### **Opening**

The meeting of the Master's thesis discussion was called at 11.00 on 27/01/2021 in <https://cern.zoom.us/my/gapcirrone>.

### **Present**

Prof. Pablo CIRRONE

Prof. Carlos GUERRERO

Alma KURMANOVA

### **Discussed issues**

- The topic of the master thesis was decided as “Development of detectors for 2D dosimetry of conventional and laser-accelerated ion beams”. While previously scintillation detector was intended to be studied, the thesis will now be performed on a new silicon carbide (SiC) detector.
- Prof. Pablo Cirrone showed a presentation and gave some information on Prague proton range measured using SiC detector. Status of the project: the new detector electronics have been developed and ready for assembly. The detector has been purchased and delivery is expected in March-April, 2021.
- Prof. Pablo Cirrone proposed for a master thesis: 1. Monte Carlo simulation (~ 1-1.5 months for performing); 2. Experiments to be performed in Pisa, Italy.
- Prof. Carlos Guerrero suggested performing the experiment in Seville, Spain with 18 MeV proton beam (see in <https://doi.org/10.1016/j.ejmp.2020.04.022>).

### **Summary**

- The master thesis will be covered: 1. MC simulation; 2. Characterization of the detector at INFN-LNS; 3. Experiments with a conventional proton beam (at CNA, Seville) in late Spring; 4. Experiment with a laser-driven beam (at CNR-INO or ELI-BeamLines) in (very) early Summer.

Minutes submitted by: Alma KURMANOVA