



Национальный исследовательский
технологический университет



MUON SHIELD Status report

Pavel Dergachev

Mikhail Gorshenkov

1. Cooperation with ROSATOM – “NIKIET” in the field of assembling technologies for the muon shield has been launched. The information on the cavern size, cranes and available areas was requested from Richard.
2. The laser cutting of GO sheets for the test samples was started last week. The estimated duration is about two-three weeks.
3. The implementation of magnetic field calculations during shape optimization of muon shield.

Laser Cutting

1. 3500 plates of 50x100 mm² for Vladimir Technological Center for Laser technologies. It is enough to produce 10 to 15 samples in order to work out the welding parameters. Then several samples will be produced for magnetic and mechanical properties measurements.
2. Cutting samples for measuring the magnetic properties in different directions for refinement the calculation model. Step 5 degree, 20-30 plates with 20x150 mm² per 1 measurement.
3. 10 plates of 100x200 mm² for NIKIET for their welding department.



1. Cutting for Vladimir Technological Center will be done in one or two weeks. We have already produced about 1000 plates. Then delivery of the plates will be another issue. Transportation company might be required (15 kRub).
2. Measurements of magnetic properties at MPEI will be done once it will be opened for visiting when restrictions due to CORONAVIRUS will be cancelled.
3. Samples for ROSATOM will be done by next week then we will transport it to the NIKIET by car ourselves (0 Rub).