REVIEW

for the extension of the project "Precision laser metrology for accelerators and detector complexes"

In the second extension of the project, the main results of the previous work of the team are presented. The most important is the successful use of the project results at the LHC collider, VIRGO gravity antenna and in the planned works on earthquake prediction in Armenia and Uzbekistan.

The second extension of the project is a development of the results already achieved in the previous extension. The main work in the new extension will be the creation of a Small-Size Precision Laser Inclinometer and experiments on the created metrological instruments. These are Laser Reference Line, Precision Laser Inclinometer and Absolute Length Gauge.

During the existence of the project, 19 publications were issued and four patents of the Russian Federation were received.

The experience of the team of authors in this direction and the important new results of fundamental importance obtained by them create confidence that the second extension of the project, if adopted, will be carried out.

The project timeline and the requested funding are adequate.

Some remarks.

1. The second extension of the project is designed for two years and is limited by the duration of the theme. This is a short time for such large-scale tasks, so I suggest the authors consider the possibility of opening a new topic at the JINR PTP.

2. For successful work on the project, a young team with a larger number is needed. I propose to find an opportunity to increase the size of the metrological group.

DLNP general laboratory seminar on the extension of the project "Precision laser metrology for accelerators and detector complexes" was held on February 26, 2021.

I propose to approve the project with the first priority in the JINR PTP.

Reviewer

Ph.D. senior scientist

Grebenyuk V.M.