

Referee answers.

1. Question.

The proposal, as a whole, is fragmentary and vague. The physics case is not elaborated in due detail. The main results obtained by the FASA team are listed, but a general picture of the phenomena studied and the physics context where this picture fits is missing.

Answer.

We have increased the amount of introduction to the project to answer these questions.

2. Question.

On the methodical side almost nothing is presented. Just a picture of the apparatus and one $dE-E$ plot are displayed without clear explanations. Work characteristics of the detectors and data about the performance of the set-up are missing. Even the measurement principles - what is measured, how it is measured and with what precision - are not given.

Answer.

We have increased the description of the methodical side set-up. What is measured, how it is measured and precisions are given in objectives of the Project.

3. Question.

Given the consideration above, it is difficult to evaluate the physics merit of the expected results of the project and whether they can be reached.

Answer.

This Project received the support of the Russian Foundation for Basic Research this year, Grant No. 19-02-00499.

4. Question.

In addition, despite the scarce information given in the proposal, I think that most of the planned measurements could be performed with the BM@N set-up.

Answer.

At the meeting of the physical section on November 8, 2018, all experts came to the conclusion that the proposed experiments could not be carried out via BM@N set-up.

5. Question.

The requested cash resource not big. Besides travel money, the rest is aimed at replacement of the CAMAC based FEE and DAQ by a VME based ones. There is no justification why this is needed. Event rates, reading times, dead time introduced by DAQ and its throughput, etc. - nothing is given.

Answer.

FASA device uses ADC and QDC made in standard VME, which have dual port memory that can store up to 32 events. Recording takes place in the "event-by-event" via VME standard at a speed 10 Mb/s. In this Project, we plan move to a VME standard our trigger system, which is now implemented via CAMAC blocks of 15 years old.

6. Question.

The accelerator resources asked for are also modest and again they are asked without any detail concerning the type of the light ions, beam energy and intensity, etc.

Answer.

Description of the necessary accelerator resources added to the project (time scale of the project).

7. Question.

The manpower, in terms of percentage of time expected to be devoted to the Project by the people involved, is not given.

Answer.

The manpower, in terms of percentage of time expected to be devoted to the project by the people involved, is added to Project.