

Review of the JINR project
"Development of a particle registration technique in future experiments with the participation of JINR"

The project has 6 research lines. Two research lines, "Development of microstructure and straw gas detectors" and "Development and application of Monte Carlo methods for modelling prototypes of electromagnetic and hadronic calorimeters" could be independent large projects. All research lines are modern scientific topics.

The list of JINR core staff consists of 32 people, most of them are from DLNP, one Head of sector from FLNP, 2 heads of sector, 1 head of group and 1 head of service from VBLHEP. All participants from non-DLNP have 0.1 FTE. From this I see that real participants are from DLNP and project involves a part of detector experts of JINR only.

Requested JINR budget for 5 years (400 K\$) is for international cooperation and materials only. Beam of electrons (Linac-200) and beam of neutrons (IBR-2M) are requested as resources. There is no request for computing resources and high energy test beam. It looks very strange for this type of project.

"The goals set in the project are aimed at solving problems arising in future collider experiments at the Super c-tau factory (SCT) in Russia, at the Super tau-charm facility (STCF) and the Circular Electron Positron Collider (CEPC) in China, and at accelerators with fixed targets at intermediate and high energies, as well as in the search experiments Mu2e-II, Comet (phase 2)."

NICA project is not mentioned in the goals, but some results of this project could be useful for NICA detectors.

"One of the goals of the project is also to train qualified personnel. Bachelors, masters, and graduate students will participate in the project and will use the results obtained in their dissertations." This is a correct intention, and the project has quite a lot of activities for students, young scientists, engineers and technicians. The results obtained during the work within the framework of the project will be included in at least 5 master's theses and at least 3 PhD theses.

With 6 research lines 9 tasks will be solved. For 5 years project the list of tasks for 32 experts is realistic and the financial request is adequate.

My additional comments and questions are in the file review_v0.doc.

I recommend approving the project for five years, 2025-2029.



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