Referee's report on project:

"NA64 (dark photons) experiment at the CERN SPS"

The NA64 experiment is a fixed-target experiment at the CERN SPS combining the active beam dump and missing energy techniques to search for rare events. The experiment P348 was proposed to the CERN SPSC in January 2014 with the primary goal of searching for the dark photon (A') decay processes through the A'->invisible and A'->e+e- decay modes. This is a channel that has been proposed as a theoretical possibility for accessing the region in which there could be interactions between ordinary and dark matter.

The scientific merit of the project is very compelling as it seeks to address one of the most topical issues in physics and astronomy. NA64 experiment has gone through the rigorous SPSC process and all matters related to costs and scientific feasibility. During the first stage of the experiment in 2016-2017 was collected 14.7×10^{10} events using 100 GeV electron beam. The results have been published in 4 articles in journals with high impact factor. Technical aspects of the NA64 experiment is presented in 9 publications.

The JINR group is responsible for the design, production, tests and installation of 14 straw tube chambers. Group is responsible for DAQ, data decoding, on-line, reconstruction and MC simulation. The group consist of 8 researchers and 5 technicians with FTE 2.4 + 2.3 only.

Presented report is focused on a scientific program and indicates the roles and responsibilities of the JINR group. More detailed layout of JINR contribution is needed in terms of time, contribution and budget. This would have given a clear indication of the JINR manpower commitment to the experiment. Current FTE=4.7 should be higher for an efficient collaboration. It would be desirable to present more detail plans for potential student participation and PhD theses preparation. The JINR leading role must be fetch out in making presentations at conferences and publications.

The JINR group is playing a pivotal role in the terms of scientific program development and is one of responsible team for detector development. It has taken a main responsibility for the thin-wall drift tube tracking system and the **report has clearly articulated the excellent progress** made by the team in the process leading to the installation and final preparation for the data taking process.

The requested budget for period 2020-2022 is 70+50+30=150 k$ and is adequate to the planned activities.

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