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Report on the Project “Complex Materials”

Theoretical studies in the field of condensed matter physics have a long-standing tradition in JINR. There are certain directions where the Bogoliubov Laboratory of Theoretical Physics (BLTP) has both a high expertise in the development of methods and approaches, and important results. Among them one can mention the complex materials. The new project suggests further research in this area with an emphasis on modern trends in condensed matter physics.

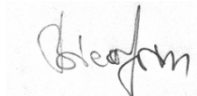
Personally, I’m involved in the field of composite materials based on natural, artificial polymeric fibers or their combinations, and magnetizable nano-microparticles. Of particular interest is the study of the structure of complex hierarchical systems among which are fractals, where I’m pleased to note the active participation of several members in the Project.

I remark the fact that the project includes notable cooperation with three experimental laboratories of JINR (Frank Laboratory of Neutron Physics, Flerov Laboratory of Nuclear Reactions and Dzhelepov Laboratory of Nuclear Problems) and with the Meshcheryakov Laboratory of Information Technologies. In my opinion, such cooperation is very useful and productive. Very attractive is the list of participants, institutes and organizations, which includes both JINR member and non-member states.

For the implementation of the project, adequate funds are requested, mainly for salaries. Considering the high professional qualification of the participants from JINR and from partner institutions, one can confidently expect the successful fulfillment of the stated tasks within the planned schedule and the full scope.

In conclusion, I strongly support the opening of the new project “Complex Materials” within the Topical Plan for JINR Research and International Cooperation.

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