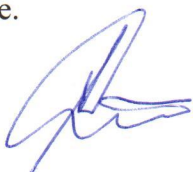


$0\nu\beta\beta$  experiments it is necessary to say that the advantage of SuperNEMO is the ability to identify both emitted electrons, which is not possible for pure calorimeters.

The SuperNEMO Demonstrator is currently in the last stage of its installation phase which will be completed in the first months of 2018. After 2.5 years of data taking, the sensitivity goal of the detector will be reached if the required background levels of internal and external contaminations will be achieved. To enhance the sensitivity and partially explore the inverted region of the effective Majorana neutrino mass (between 40 and 110 meV), the requirement on the  $0\nu\beta\beta$  half-life is at the level of  $T(0\nu)_{1/2} > 10^{26}$  yr. With 20 detector modules based on the design of the Demonstrator and hosting 5 kg of  $^{82}\text{Se}$  each, SuperNEMO will be able to fulfill this requirement after an exposure of 500 kg·yr.

The JINR group had played a crucial role in the development of the NEMO-3: construction of the calorimeter, its calibration, passive shielding, development of software, data taking and analysis. The group has accumulated huge experience, which the group continues to deliver for the SuperNEMO Demonstrator project focusing on the same areas. There is no doubt that the impact and contribution of JINR group is valuable and important for the SuperNEMO collaboration. That's why the participation of JINR group in this field leading project should be considered as a highest priority issue.

Leading researcher NRC KI - ITEP  
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