**Referee Report on the MPD project**

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It should be noted that significant progress has been made in MPD since the summer of 2024. First of all, it has been made in launching the key system of the detector - the superconducting magnet: cooling to the operating temperature of 4.5 K has been carried out. The flow rate of liquid helium at 4.5 K is about 130 l / h, which is better than the design - 200 l / h! The manufacture of detector elements (ECal, TOF, etc.) is close to completion. The DAQ system is ready for operation. A crucial stage lies ahead - the integration of all systems into the detector and the installation of the detector on the experimental point of the NICA collider. The presented plan for the assembly and launch of the detector by the end of 2025 looks quite realistic. I would like to note the high publication activity of the MPD collaboration even before the start of the experiments, which allows us to hope for successful work in the future. A fairly detailed development of a plan for the upgrade of the MPD for 2026-29 has begun, which will significantly increase the capabilities of the detector. Of course, the NICA collider with the MPD detector is not only the flagship project of JINR, but also one of the most significant projects in the HEP not only in the Russian Federation, but also in the world.

As a recommendation, I would advise specifying the physics program in terms of which tasks can be guaranteed to be solved in the existing MPD configuration, and which will remain for phase 2.

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