

## Student's Zone 2019 of the NICA Project



Contribution ID: 101 Type: **High-performance computing: installation, maintenance, operation**

# Design and heat transfer simulations for the MPD-TOF detector cooling system

Electronic devices' overheating may cause functioning problems and production of inaccurate data in the experiment's detectors. The aim of the project was to design the most optimal and efficient way of cooling the MPD-TOF detector's module, to ensure the optimal operating condition for the Front End Electronics. The work consisted of preparing detailed CAD model of the existing module and proposed cooling system, and performing CFD simulations of heat transfer inside the module.

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