

## Numerical modeling of superconductors and their application for magnetic shielding

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Electron cooling system for the NICA project requires a high homogeneity of the magnetic field in order to obtain the required cooling efficiency. High temperature superconducting open-type shielding could decrease the costs of such system (compared to the conventional high precision solenoid windings). Shielding effect of HTS tape was tested. The experiments were conducted in JINR, Russia, in the magnetic fields up to 40 mT. Numerical model of the shield was created and compared with the results obtained from experiments.

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