**Superconducting functional materials for advanced quantum technologies**

A.B. Author 1, \* A.B. Coauthor 2

1 Institute, City, Russia

2 Affiliation, City, Country

\*email: abcdef@gmail.com

 School "Superconductive functional materials for advanced quantum technologies" will be held from September 25 to 29, 2023 at MIPT.

The school will be held as part of the RSF project "Superconducting functional materials for advanced quantum technologies", the purpose of which is to form the physical foundations for creating a class of fundamentally new elements and devices for post-silicon electronics. The fundamental focus of the project is focused on the study of the possibilities of applying in this area functional quantum materials with topologically protected electronic subsystems, combining bulk magnetic properties, and materials in which the coexistence of superconductivity and magnetism is realized on an atomic scale. The subject of the school includes the fundamentals of the physics of magnetic topological insulators, hybrid superconductor-ferromagnet systems, as well as discussion of ideas for developing control elements for superconducting quantum circuits and specific devices based on them, in particular elements of cryogenic thermometry in the millikelvin range.

The school is a continuation of the schools held in 2016 and 2017, the laboratory of topological quantum phenomena in superconducting systems, which in 2021 became a part of the Center for Advanced Mesophysics and Nanotechnology.

Abstracts should contain the title of the work, the list of authors, the place of work and the content, ranging in size from one paragraph to one page.

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**Bibliography**

[1] A.B. Author, JETP Lett. 12, 345 (2022).

[2] A.B. Coauthor, Phys. Rev. B 12, 3456 (2022).