**comparative analysis of various variants of magnetic inertial fusion**

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The paper presents a comparative analysis of various variants of magnetic inertial fusion. The main thermophysical parameters of such installations with high-pulse energy lasers and high-speed plasma jets are determined. It is shown that modern thermonuclear plants, as well as those under development, can be used for a wide range of research and directions.

Comparison of various options for the implementation of magnetic inertial fusion allows us to see a wide range of unexplored tasks and, accordingly, the trajectory of action soon. The work also compared laser installations that are used for the implementation of MIF. Namely MagLIF, Z-Machine, NIF and OMEGA. In addition, the article mentioned other installations with a description of their use in various experiments. The paper also talks about some startups of the last ten years that will be implemented soon.

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