

On possibility of creating a muon-catalytic reactor based on periodic injection of ball lightnings in a chamber with D-T mixture

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The most perspective approach to nuclear fusion is the concept of muon-catalyzed fusion. As follows from theory, the reaction can occur at a very low temperatures. The main problem of muon-catalyzed nuclear fusion lies in the fact that existing sources, such as linear accelerators, require considerable energy expenses for the production of muons. A cheap source of muons is ball lightning, which interacts with a target or a dense low-temperature deuterium-tritium mixture. Earlier in experiments, the phenomenon of anomalous passage of ball lightning through solid-state absorbing filter was discovered [1]. This phenomenon can be explained only by the multistage generation of particles at the interaction of high-energy protons of the external shell of ball lightning with a dense medium [2]. The existence of muons and neutrino at the interaction of ball lightning with a thick metal absorber is confirmed by the presence of a ball lightning passed through the absorber 6 cm thick from plumbum [2]. In the ordinary state, the energy that protons of ball lightning gained in alternating fields is equal to 20-25 MeV [3]. Using the energy converter allows protons to gain energy, which is required for generation the pions. The decay of pions, as is well known, leads to generation of muons and muon neutrino. As is known, one and the same negative muon can participate in 120-150 fusion events for during of its existence. Generation of muons by means of the ball lightning makes it possible to create a breakthrough technology in nuclear fusion which has no unsolvable problems. In a short time it is possible to create a compact nuclear fusion reactor. The approximate cost of creating a demonstration version of the reactor based on muon catalysis is one hundred million times less than the cost of the demo version of tokamak. Ball lightning is the key to solving the problem of obtaining environmental pure energy. This key must be used.

References

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