

Abstract Submitted
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Energy spectrum and kinetics of the fusing particles D.D. RYUTOV, S.V. PUTVINSKI, P.N. YUSHMANOV, ,AND THE TAE TEAM, Tri Alpha Energy Incorporated — The fusing particles (e.g., D and T, or p and ^{11}B) contribution to the reaction rate can be found by the integration of the fusion reactivity over the particle distribution functions. The distribution function (e.g., Maxwellian) is depleted in the energy range determined by the highest reactivity and has to be replenished by particle collisions. The kinetics of the replenishment process may affect the rate of fusion energy release. We present a simple analysis of the corresponding kinetic problems for the conditions typical for the standard and advanced-fuel fusion reactions and assess the possible effect on the reaction yield.

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Retired

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