

Abstract Submitted  
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**The ignition of the HB11 fusion reaction in a heterogeneous mutual impact configuration** FRIEDWARDT WINTERBERG, University of Nevada - Reno — It was shown that the cross section-velocity product of a thermonuclear reaction averaged over a Maxwellian can be substantially increased in a mutual colliding impact configuration [1]. While the cross-section velocity product for the neutron-less hydrogen-boron11 reaction can thereby be increased by about 40%, the heterogeneous separation of the boron from the hydrogen in a lattice leads to an almost 50% reduction of the bremsstrahlungs- losses. Taken together, this leads to an approximately two-fold gain, sufficient to ignite the hydrogen-boron11 thermonuclear reaction [2].

[1] F. Winterberg, Physics of Plasmas 21, 092708 (2014.)

[2] F. Winterberg, “The Release of Thermonuclear Energy by Inertial Confinement,” World Scientific, 2010, p. 134.

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