## Abstract Submitted for the SHOCK07 Meeting of The American Physical Society

Isentropic Compression of Hydrogen Isotopes Crystal Phase up to 5 Mbar with Ultra-High Magnetic Field Pressure<sup>1</sup> ALEXANDER BYKOV, G. BORISKOV, N. EGOROV, M. DOLOTENKO, YU. KUROPATKIN, N. LUKYANOV, V. MIRONENKO, S. BELOV, V. BELYASHKIN, M. LOMONOSOV, Russian Federal Nuclear Center - VNIIEF — A device for isentropic compression of condensed hydrogen isotopes with an ultra-high magnetic field pressure of a MC-1 generator is described in the paper. Experimental results of hydrogen and deuterium compression at initial temperature of  $\leq$ 7K and their comparison with P- $\rho$  diagram that extrapolates compression results on diamond anvils are presented.

 $^1\mathrm{The}$  work was performed in the frameworks of the ISTC project # 2564.

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