

Abstract Submitted  
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**Helium, from He<sup>3</sup> Superfluid to Alpha-spin**<sup>1</sup> FATAHILLAH HIDAJATULLAH-WIDASTRA<sup>2</sup>, Prodi of Physics University of Indonesia, WIDASTRA HIDAJATULLAH-MAKSOED<sup>3</sup>, PT. INDISI, Tbk, Jl. Bengawan 28, Bandung 40114 — Accompanying helium-using of “Two Eagles” balloon group 2015 World record [pacificballoon.com@Flight-Status.php](http://pacificballoon.com@Flight-Status.php), superfluid He<sup>3</sup> offers a unique “testing ground” for rapid phase transitions. Recent experiments where a rotating superfluid He<sup>3</sup> was locally heated well above the critical temperature by absorption of neutrons [4,5] received vortex formation under a rapid 2<sup>nd</sup> order phase transition-I.S. Aranson, *et.al*, Physica C, “**Vortex Matter in Superconductors at Extreme SCALES and Conditions**”, v 332, n 1-4, May 2000, h 129. Further for “alpha-spin resembles the vortex formed as a consequence of the interaction of 4 vortexes” sought the “it will be sufficient to calculate the energy shift with the singlet & triplet  $m = 0$ -S Gasiorowics:”**Quantum Physics**”, 2003, h 220

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<sup>2</sup>Can be referred to Alan Bradley & Anne BRADSTREET of helium-using of “Two Eagles” balloon group world record

<sup>3</sup>Many Tributes devotes to theLate HE. Mr. Ir. H. Tb. IWAN ZUCHRA

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