JETP Letters 2011 vol.94 N1, pages 68-72

Discovery of the classical Bose-Einstein condensation of magnons in solid antiferromagnets

Bunkov Y., Alakshin E., Gazizulin R., Klochkov A., Kuzmin V., Safin T., Tagirov M.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Results of experiments in which the Bose-Einstein condensate of magnons is created in the CsMnF 3 easy-plane antiferromagnet in a system with coupled nuclear-electron precession with dynamical frequency shift are presented. This condensate is similar to the Bose-Einstein condensate of magnons in superfluid 3He-A in aerogel.

http://dx.doi.org/10.1134/S0021364011130066