

Effect of Phase Decomposition on Magnetic Structure of $\text{Cu}_{0.4}\text{Mn}_{0.3}\text{Ni}_{0.3}$

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The purpose of present investigation was to determine the magnetic structure of the quenched $\text{Cu}_{0.4}\text{Mn}_{0.3}\text{Ni}_{0.3}$ and the effects of its ageing. The sample was examined with neutron diffraction. The results indicate that in small fraction of the quenched sample volume there are two types of antiferromagnetic order: one of them AF1 of the long range, the other one of the short range. Ageing induces spinodal decomposition which yields disappearance of AF1 long range order and increase in short range order. The evolution of magnetic ordering with the ageing time is different than that of atomic ordering.